





Phase III DETS Evaluation Report September 2006

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A Process Evaluation of a K-12 Diabetes-Based Science Education Program for Tribal Schools

#### **INTRODUCTION**

The Diabetes-Based Science Education in Tribal Schools (DETS) program is a cooperative effort among the NIH's National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and Office of Science Education (OSE) with the Centers for Disease Control and Prevention (CDC), the Indian Health Service (IHS), and eight Tribal Colleges and Universities (TCUs). The partners in this collaboration are developing a K-12 diabetes-based education program for use in tribal schools throughout the United States. Program development includes collaboration among multiple TCUs; integration of tribal cultures and science education within the context of diabetes; involvement of family and community; incorporation of the daily experience of American Indian and Alaska Native children with diabetes in their communities; inclusion of Tribal Elders and other significant community groups in program development within the schools; and dissemination of the program to schools throughout Indian Country.

The stated revised goals of the project are to:

- 1. help Tribal children to understand about diabetes, its complications and ways to reduce the risk for its onset [original goal 1: reduce the morbidity and mortality related to diabetes and its complications by helping tribal children understand and take more responsibility for controlling and managing their own diabetes];
- 2. enhance K-12 Tribal students' understanding and appreciation of direct and indirect effects of scientific discoveries on diagnosis, treatment, and control of diabetes [no change from original goal 2]; and
- 3. encourage Tribal children to enter health science professions [no change from original goal 3].

These goals were consensually revised and established during phase II of the project.

The three key questions addressed in this phase III study are:

1. Is the DETS program being developed as planned? Specifically, DETS planning will be examined relative to: a) the three goals including the science strand and



community health strand; b) alignment of curriculum content to enduring understandings; and c) application of the 5E pedagogical model.

- 2. Are DETS program critical processes being implemented? Critical processes used by the DETS program include use of the 5E model and *understanding by design* curriculum development strategies. Furthermore, implementation of the curriculum in the classroom will be examined relative to fidelity to the 5E model, enduring understandings, and inquiry-based science principles. [For DETS *understanding by design*, which is curriculum development process, involved three basic steps using worksheet documents. The first document starts by stating the DETS goal that is to be written about in a lesson. This is then followed by a place to write out *understandings* ("students will understand that") and *essential questions*. Stage 2 of this worksheet requires that the developer write out *assessment evidence* (e.g., performance tasks) for desired understandings. The third stage of this worksheet asks the developer to write out the *learning activities* for the lesson. See Appendix D for more detail.]
- 3. Has the DETS curriculum been developed into the expected output (i.e., a replacement modularized curriculum) that meets its three general goals? The central DETS program metaphor of *health is life in balance* generates a curriculum approach that incorporates both science concepts and community health concepts for each of the three goals. This outcome evaluation question focuses on the extent of alignment of the curriculum to the central metaphor within each of the three goals. Furthermore, the replacement modularization of the curriculum will be examined within modules relative to the central metaphor and three goals. That is, is there evidence that the three goals and central metaphor are present and have had an impact (e.g., on achievement; on attitude) within specific modules?

The purpose of this phase III evaluation report is to provide process analysis of the DETS Curriculum Project relative to these three key questions, where the first two questions are process evaluation questions and the third question is an outcome evaluation question. In this regard there are five data sources used to analyze the three key questions: 1) lesson specific DETS Pilot Test Evaluation forms; 2) web-based DETS Pilot and Beta Test form generalized across several lessons; 3) discussions at quarterly DETS face-to-face meetings; 4) External Advisory Committee (EAC) meetings (December 2005 and September 2006); 5) site visits to 6 classrooms across three TCUs.

Lesson specific DETS Pilot Test Evaluation forms were distributed to Principal Investigators (PIs) via email and at quarterly meetings. This form was developed by the external evaluator in collaboration with the DETS Evaluation Subcommittee, consisting of representatives from the Federal agencies and the TCUs. The form covered the *clarity* of lesson goals, objectives, vocabulary, material lists, and local, state and national standards. There were



overall questions about student participation, content, ease-of-use and lesson difficulty. A copy of this form may be found in Appendix A.

The web-based generalized DETS Pilot Test Teacher Web Survey asks for overall ratings about difficulty of content, ease-of-use, level of engagement as well as written responses regarding strengths and weaknesses of lessons used. This survey focused on *all* the pilot lessons that a teacher tested rather than a particular lesson. A copy of this form may be found in Appendix A.

Phase III of this project spanned the end of lesson-specific pilot testing into beta testing of several lessons at a time. In this regard a web-based generalized DETS Beta Test Web Survey asks a series of questions. The background questions relate to extent of participation in the beta test, the questions about the DETS lessons probe lesson difficulty, ease-of-use, level of engagement, role of standards, level of implementation, cultural content (new for fall '06 beta test) as well as written responses about strengths and weaknesses of lessons used. Appendix A has a copy of this form.

During phase III external evaluator Dr. Coulson has attended five quarterly DETS Steering committee meetings in Walker, Minnesota (May 2005), Baraga, Michigan (September 2005), Bellingham, Washington (January 2006), and Spirit Lake, North Dakota (June 2006). A fifth special Steering committee meeting was held in April 2006 in Albuquerque, New Mexico. Dr. Coulson presented evaluation material at each meeting as well as actively engaged in curriculum development discussions during these meetings. The evaluation presentation PowerPoints used at these meetings may be found in Appendix B.

In December of 2005 Dr. Coulson attended the External Advisory Committee meeting in Denver to present on the status of the evaluation workwith Carolee Dodge Francis. Presentations were given to the EAC from the four DETS subcommittees: 1) K-4; 2) 5-8; 3) 9-12; 4) Evaluation. The EAC evaluation PowerPoint may be found in Appendix C. In Septemper 2006 Dr. Coulson facilitated the K-4 curriculum review with EAC members at the second Denver meeting.

For site visits, classrooms were visited in schools associated with Leech Lake Tribal College, Minnesota (i.e., North School, Cass Lake and Bug-O-Nay-Ge-Shig), Keweenaw Bay Ojibwa Community College, Michigan (i.e., Barkell Elementary and L'Anse Middle), and Southwestern Indian Polytechnic Institute, New Mexico (i.e., Santa Clara Day School). Some classes were teaching a DETS lessons, others had completed teaching a DETS lesson and finally some classes were preparing to teach a DETS lesson.



#### BACKGROUND

This is the third evaluation report on the DETS project. The phase I report (February 2004) examined the feasibility of the three DETS curriculum goals first in the broad sense of *practicality, and political viability*, secondly in terms of group consensus about goal performance and thirdly from a resource and cost perspective. The four key questions addressed in the phase I study were:

- 1. Are the stated goals of the DETS program achievable and measurable, and if not, what goals would be more practical?
- 2. For each goal, what would be a reasonable standard of performance by a given year?
- 3. What are the limitations in human and material resources, classroom curricular and instructional constraints, budget, and other system capabilities that should be considered when designing the K-12 DETS curriculum?
- 4. What is the most cost-effective format (e.g., website, brochure, video, kit, handout, tip sheet, meal planner) for a DETS K-12 curriculum supplement or other tangible product aimed at achieving project goals?

Analyses in that phase I report were based on the four program evaluation standards presented by the Joint Committee on Standards for Educational Evaluation (i.e., practicality, utility, propriety, accuracy). The focus was on the standards of utility and feasibility. In addition analysis of estimated costs could be compared to available dollars to add to the feasibility of the current DETS effort. That is, the question could be asked: "how feasible is the DETS curriculum development program when the allocated dollars (i.e., grant budgets) are compared to the cost estimates in this paper?"

The conclusions of the phase I report were: 1) goals two and three (understanding science; health education and careers) are more practical and feasible than goal one (reducing morbidity - which might be considered as part of the mission of DETS); 2) subsequent discussion and revisions of DETS goals resulted in three goals that are *practical* and meet sufficient *performance standards*; 3) the cost-utility ratio is more favorable for classroom-based instruction than web-based instruction; 4) cost estimation methodology cross-validated within a reasonable ranges (i.e., 5% and 1%); 5) the empirically derived cost-utility ratios for the science strand and the health education strand were nearly identical; 6) future steering committee meetings might provide opportunities for separate stakeholder estimates of probabilities and utilities in order to generate comparative cost-utility ratios; 7) future steering committee meetings might provide opportunities to review **actual** curriculum content versus **desired** curriculum content as well as review the relative balance of curriculum priorities related to *enduring understandings, important to know or do*, and *worth being familiar with*.



By addressing all four key questions in the phase I report a foundation for phase II pilotbeta-field testing evaluation work was established. Practical goals lead directly to measurable objectives and assignable tasks. In turn, objectives and tasks provide a clear basis for planning and timeline development. Once timelines are agreed upon, attitude (teachers and students) and achievement (students) instrumentation can be planned and written. In addition, the establishment of content specifications and the 5E template provide standards against which an evaluation team would be able to measure the curriculum development process. Furthermore with an agreed upon set of curriculum priorities (i.e., *enduring understandings, important to know or do*, and *worth being familiar with*) the groundwork for development of assessments has been completed. From these priorities it is possible to balance assessment choices among traditional multiple choice tests and quizzes, open-ended contructivistic essays, and class projects and presentations (i.e., authentic assessment).

The phase II report provided process analysis of DETS lessons relative to: three program goals; use of 5E template; development of schedules and timelines for pilot, beta and field testing; implementation of changes based on pilot test data; assessment strategy; and overall impact of the curriculum. The six key questions addressed in the phase II study were:

- 1. Are lesson development efforts adequately aligned with the three program goals?
- 2. Are lesson development efforts following the 5E template for each of the three curriculum development subcommittees (K-4, 5-8, 9-12)?
- 3. Has a systematic Field Test Plan with timeline been developed and agreed upon?
- 4. Have pilot tests been conducted for each lesson, and have the changes called for by the pilot tests been made to the lessons?
- 5. Has an integrated, authentic assessment strategy been planned and implemented to measure the effectiveness of lessons?
- 6. What has been the overall impact of the pilot test of the curriculum on student achievement and attitude toward diabetes within the context of science and health education?

In the earlier stages of lesson development writers tended to focus on content independent of the three DETS goals. Moreover, the direction of lesson development shifted after the December 2004 EAC review toward building a comprehensive K-12 scope-and-sequence document (i.e., "DETS - Diabetes Education in Tribal Schools: Mission, Purpose, Goals, Concepts, and Objectives"). As a consequence of this shift, the lesson content reviewed



in the phase II report was based on curriculum CDs distributed at the September 2004 and January 2005 quarterly meetings. For K-4, it was appropriate that there would be less coverage of goal two, which focuses on the diabetes of science. The low percentages for K-4 for goals one and three may be due simply to the lack of explicit reference to a particular goal. For example, there were lessons within K-4 on the prevention of disease through traditional diet. While many of these lessons may have referred implicitly to diabetes, the lack of explicit reference to diabetes resulted in a check mark that indicated not present. The 9-12 low percentage (i.e., 43%) for goal two was unexpected, especially since the 9-12 curriculum plans to have a strong emphasis on the science of diabetes. However, because the reviewed lesson documents were in their early stages of development (i.e., September 2004 or before), it is also likely that KBOCC (i.e., health strand) had developed more of its lessons than NWIC (i.e., science strand).

It appears that in the earlier stages (i.e., before September 2004) of lesson development attention to goals was less critical than developing grade-level appropriate diabetes science and health content. Consequently the curriculum "spread-out" across content areas too much. The EAC review recommended that coherence be increased by focusing on a narrower content field driven by *enduring understandings*. For the most part this has been happening since the three curriculum teams have refocused their 2005 writing efforts not on lessons per se but on the *DETS* - *Diabetes Education in Tribal Schools: Mission, Purpose, Goals, Concepts, and Objectives* document. During phase II DETS has following a process development strategy characterized by coherence, focus and rigor (three known characteristics of effective science programs). The coherence and focus derive from mapping *enduring understandings* as they are derived from the three DETS project goals. Process rigor derives from the external review process and the content rigor derives from the DETS Scientific Review Committee, which has been reviewing all the content accuracy of lessons before they are tested in the classroom.

From the data in the phase II report, the use of the 5E model appeared to be successful. This finding contrasted somewhat with the finding of the AIM (Analyzing Instructional Materials) which found that the application of the 5E model was inconsistent and insufficient. However, the AIM process was only applied to *three* lessons (i.e., one for K-4; one for 5-8 and one for 9-12) during the December 2004 EAC review. On the other hand, by scanning all the lessons available on CDs, it seemed that most developers made full use of the 5E model (see Table 2). The possible exception would be the 5-8 lessons. It must be noted, however, that the 5-8 lessons which were available for review tended to be "older" (e.g., late 2003 and early 2004) and thereby developed before the DETS Project put a strong emphasis on using the 5E model as a lesson template.

During phase II a systematic field test plan was discussed and reviewed by the Evaluation Subcommittee during its monthly DETS conference calls. In addition the field test plan as well as the beta test plan had been presented and accepted at the May 2005 Steering Committee quarterly meeting at Leech Lake.



In phase II some evidence of authentic assessment was found among evaluate activities. Clearly the curriculum writers are striving to create evaluate activities that are authentic (i.e., hands-on, active, participatory, cooperative, inquiry-based). However, lesson assessments (i.e., evaluate activities) still seemed nascent. Finally in some cases pilot testing preceded the availability of materials which caused some frustration among the teachers that were teaching the lesson.

From the available phase II pre-post data it is clear that DETS was having an impact. All but one of the pre-post gains were statistically significant. Furthermore, the gains were stronger when the lesson was improved and taught a second time (to a different class).

Overall the phase II evidence showed that the development of the DETS curriculum during the pilot phase of this project has resulted in an improving set of curriculum lessons and attending supporting materials. Table 1 summarizes the number of lessons that have been piloted tested through May 2005 (i.e., through the end of phase II).

### Table 1 Number of Pilot Test Lessons Taught and Evaluated Through the End of Phase II (May 2005)

|              | K-4 | 5-8 | 9-12 |
|--------------|-----|-----|------|
| Fort Peck    | 11  | 1   |      |
| SIPI         |     | 53  |      |
| Haskell      | 25  |     |      |
| Keweenaw Bay | 2   | 1   |      |
| Leech Lake   |     | 4   |      |
| Stone Child  |     | 9   |      |

Table 1 reflects the number of pilot test lessons that were actually evaluated during phase II with either the *DETS Pilot Test Lesson Evaluation Form* or the *DETS Pilot Test Teacher Web Survey*. An unknown number of additional lessons were tested but not evaluated with one of these forms.

It appears that in the earlier stages (i.e., before September 2004) of lesson development attention to goals was less critical than developing grade-level appropriate diabetes science and health content. Consequently the curriculum "spread-out" across content areas too much. The



EAC review recommended that coherence be increased by focusing on a narrower content field driven by *enduring understandings*. For the most part this has been happening since the three curriculum teams have refocused their 2005 writing efforts not on lessons per se but on the *DETS* - *Diabetes Education in Tribal Schools: Mission, Purpose, Goals, Concepts, and Objectives* document. The success of this refocus on the conceptual framework of DETS is the subject of the Phase III evaluation work during the beta test and field test phases of the evaluation process. While successful in making improvements in phase II, during phase III the DETS curriculum development process must show conceptual focus around its central metaphor (*Health is Life in Balance*), and the *enduring understandings* associated with the three DETS goals.

The phase III focus will tighten a sprawling set of content materials, making it easier for prospective teachers and schools to navigate and select lessons to replace parts of their existing curriculum. Furthermore, during phase III attention will be given to length of lesson (i.e., not too long), vocabulary level (i.e., not too difficult), cultural relevance (currently often very appropriate), and consistent pedagogical formatting (i.e., the 5E model). The findings of this phase III report are considered next.





#### **FINDINGS**

The evaluation was divided into 12 major evaluation activities. The first six tasks focused on the beta test, whereas the final six tasks focused on the field test of the curriculum materials. Table 2 summarizes these 12 tasks and their status.

| Major Evaluation Activity                                   | Status   |
|---|--|
| 1. Recommend beta test<br>evaluation design strategy        | <i>Completed</i> : Reviewed and finalized beta test strategy with evaluation subcommittee August 2005  |
| 2. Present evaluation design strategy to steering committee | <i>Completed</i> : Initial beta test strategy presented at KBOCC<br>steering committee meeting in September 2005; revised<br>based on December 2005 EAC review; final beta test<br>strategy presented and approved at January 2006 NWIC<br>steering committee meeting.   |
| 3. Develop instrumentation binder for beta test             | <i>Completed</i> : Reviewed instrumentation criteria with steering committee at January 2006 NWIC meeting. Presented expanded instrumentation binder at special April 2006 steering committee meeting in Albuquerque.  |
| 4. December 2005 EAC meeting                                | <i>Attended</i> : Presented status of evaluation work to EAC; established revised timeline for beta and field testing.   |
| 5. Conduct beta test site visits in spring 2006             | <i>Completed</i> : Classrooms were visited in schools associated<br>with Leech Lake Tribal College, Minnesota (i.e., North<br>School, Cass Lake and Bug-O-Nay-Ge-Shig), Keweenaw<br>Bay Ojibwa Community College, Michigan (i.e., Barkell<br>Elementary and L'Anse Middle), and Southwestern Indian<br>Polytechnic Institute, New Mexico (i.e., Santa Clara Day<br>School). Some classes were teaching a DETS lessons,<br>others had completed teaching a DETS lesson and finally<br>some classes were preparing to teach a DETS lesson. |
| 6. Generate beta test reports in spring and fall 2006       | <i>Completed</i> : Three TCU-based beta reports completed and distributed at the June 2006 CCCC steering committee meeting. Three TCU-based beta reports completed and will be distributed at the October 2006 Fort Peck steering committee meeting.   |
| 7. Develop field test evaluation design                     | <i>Completed</i> : Worked with Evaluation Subcommittee and PIs to develop field test evaluation design with all prototype instrumentation including fidelity of implementation measures.   |

| Table 2                                     |
|---|
| Status Summary of Major Evaluation Activity |



| 8. Develop instrumentation         | In progress: Collecting student achievement tests written |
|------------------------------------|---|
| binder for field test              | by curriculum subcommittees during beta testing which is  |
|                                    | taking place through the fall 2006. Test items to be      |
|                                    | analyzed statistically and developed into standardized    |
|                                    | instrumentation.  |
| 9. Schedule field test assessments | Pending July 2007 when school participation lists with    |
| and site visits                    | contact information have been finalized.                  |
| 10. Conduct field test site visits | Pending September 2007.                                   |
| 11. Provide interim report of      | Pending December 2007                                     |
| field test findings                |   |
| 12. Produce report based on field  | Pending March 2008.                                       |
| test data                          |   |

Overall, the DETS program has been developed as planned. Critical processes have been attended to via quarterly steering committee meetings, monthly conference calls as well as the December 2005 and September 2006 external advisory committee meetings in Denver. The curriculum output has closely followed the central DETS program metaphor of *health is life in balance*. While this planning process has taken longer than anticipated, overall the three DETS curriculum subcommittees (i.e., K-4; 5-8; 9-12) have aligned lesson development with the three program goals, focused on aligning curriculum content to enduring understandings, and applied the 5E pedagogical model. The main curriculum development delay was associated with the field test. That is, the December 2005 EAC committee recommended postponing the field test until September 2007. At this point it was agreed that the three DETS curriculum subcommittees (i.e., K-4; 5-8; 9-12) would have their lesson materials in final pre-production form. This was necessary in order to implement a standardized and systematic field test. Preceding the 2007-2008 academic year field test would be the beta test of these materials.

The main recommendation from the EAC when it met in December 2005 was to move the field testing of the curriculum materials to September 2007. This recommendation was based on the fact that some of the curriculum materials were not in final pre-production mode and that accomplishing this (i.e., ready final pre-production materials) was not feasible by the currently scheduled date for field testing in the 2005-2006 academic year. In order to run a fair field test it is critical that all the materials are in a format that is as close to production form as possible.

Since some of the DETS lessons and units were complete the design of the beta testing was revised and presented at the January 2006 steering committee meeting at Northwest Indian College in Bellingham, Washington. The revised beta test strategy incorporated the notion of "rolling mini-beta tests". The word "rolling" indicates different starting times, and the word "mini" indicates that each TCU would conduct a smaller scale test of a DETS unit that was ready for beta testing. This strategy permitted TCUs to begin implementing a beta unit or series of DETS lessons in the classroom when they became ready. Ideally, to rule out time related



variables, one would implement the beta units at the same time. However, the rolling mini-beta test approach accommodated the differential development of the DETS units across the three curriculum subcommittees (i.e., K-4; 5-8; 9-12). Furthermore this revised design strategy did not hold up beta testing for schools that had classes in place to implement the lessons.

In order to maintain a rolling, smaller scale beta test responsive to TCU readiness, instrumentation was developed at the local level. Specifically, writing teams were responsible for developing pre and post content oriented achievement tests while the evaluator provided instrumentation templates for attitude surveys. This approach obviated the need for the evaluator to write content tests without knowing the content ahead of time (i.e., materials not available), and thereby slowing down the rolling mini-beta tests. Furthermore it insured that the content of the achievement tests was closely aligned with the lessons being taught. In contrast the main feature of the attitude surveys was the scaling of the items, which could be standardized through the use of a template. Thus the DETS coordinators would be able to create attitude surveys simply by plugging in lesson names and activity names in the appropriate places. Finally in order to reduce test anxiety, the achievement tests are referred to as "knowledge surveys". This would not only reduce test anxiety, it would help when asking students to take a "pre test" before being introduced to the material: "*It is not a test, but a survey*". Beta test instrumentation developed in the spring of 2006 has been incorporated into a revised and expanded *September 2006 Instrumentation Binder*.

In order to reflect changes in curriculum development and subsequent beta testing and field testing, a new timeline was developed and presented at the January '06 steering committee meeting in Bellingham, WA. This timeline extended beta testing through the 2006 - 2007 academic year, with the field testing beginning in September 2007, and extending through June of 2008. Figure 1 below shows this revised timeline.



### Figure 1: DETS Timeline (as presented at the June '06 Steering Committee meeting at Spirit Lake)

| Current DETS TIMELINE: '06 – '07  |   |   |  |  |  |  |
|---|---|---|--|--|--|--|
| Jan '06 – June '06  | July '06 – Aug '06  | Sep '06 – Dec '06   | Jan '07 – June '07   |  |  |  |
| <b>Beta Testing</b><br>• pre/post achievement<br>• pre/post attitude<br>• implementation<br>survey<br>• classroom<br>observations | Concordant Committee<br>I<br>• align goals to key<br>concepts<br>• align key concepts to<br>objectives<br>• align objectives to unit<br>titles<br>• edit for consistent look-<br>and-feel<br>• fully integrate cultural and | <b>Beta Testing II</b><br>• pre/post achievement<br>• pre/post attitude<br>• implementation survey<br>• classroom observations<br>• Fidelity of<br>implementation | <b>Beta Testing III</b><br>• pre/post achievement<br>• pre/post attitude<br>• implementation survey<br>• classroom observations<br>• Sister Sites<br>• Fidelity of<br>implementation |  |  |  |
|   | <ul><li>scientific components</li><li>Storyboard all marketing material</li></ul>   |   |  |  |  |  |





Through January 2006 pilot test data was reported by teachers. For this phase III report there were three report dates for pilot data: May 19, 2005; September 21, 2005 and January 24, 2006. Pilot data focused on individual lessons. During these reporting dates there were eleven separate pilot reports associated with seven TCUs. Appendix E contains all the data from these reports.

During the first round of beta testing (i.e., January '06 through June '06) data was received from three TCUs. These three beta test reports were provided to the three principal investigators (PIs) at the June 2006 steering committee meeting in Spirit Lake, North Dakota. Three additional beta test reports will be distributed at the October 2006 steering committee meeting in Billings, Montana. Appendix E also contains this data.

To further implement the beta test design strategy, in August 2006 checklists were developed and distributed to each TCU. One beta test checklist was designed for PIs, while a second checklist was designed for teachers. The purpose of these checklists was to provide both



PIs and teachers with a succinct (i.e., one page) list of discrete tasks to be performed before, during and after beta testing. Before beta testing PIs are responsible for providing teachers via their DETS coordinators with: a) pre-knowledge surveys (produced by writers); and b) preattitude surveys based on the template available in the Instrumentation Binder or directly from the external evaluator. Also PIs were responsible for reminding teachers to set up a system for matching (i.e., linking) pre-surveys to post-surveys on a student-by-student basis and to review all lessons thoroughly in order to implement the DETS lessons as written. During the beta test PIs are expected to check that pre-surveys have been properly administered and remind teachers of the matching task. After the beta test PIs are expected to collect all pre and post lesson surveys (knowledge and attitude), mail copies to the external evaluator with an answer key and to remind teachers to complete the online teacher web survey designed by the external evaluator. For their part teachers before the beta test are expected to obtain the pre-knowledge surveys and pre-attitude surveys, set up a system for linking or matching pre and post surveys, and review all DETS lessons thoroughly. During the beta test teachers are expected to note how closely they were able to follow the DETS lessons as written, administer the pre-surveys before teaching the lessons, administer the post-surveys within one week of completing the lesson and finally physically match pre and post surveys on a student-by-student basis. After teaching the DETS lessons teachers are to return all surveys to the DETS coordinator as well as complete the online teacher web survey posted by the external evaluator. These checklists may be found in the September 2006 Revised and Expanded Instrumentation Binder included in Appendix F.

The *September 2006 Revised and Expanded Instrumentation Binder* is a comprehensive document that contains all the forms used for pilot testing and beta testing. A future edition will also include all the assessment instruments to be used for the field testing that will start in September 2007. In addition to assessment instrumentation this Instrumentation Binder contains the in-class observation protocol, example letter of commitment for teachers, photo permission slips, and the beta test check lists for teachers and principal investigators discussed above. This Instrumentation Binder is a dynamic document in that material is added to it as the DETS evaluation progresses. It was distributed at the January 2006 steering committee meeting at Northwest Indian College, Washington, and distributed again and the special steering committee meeting in Albuquerque, New Mexico, in April 2006. Appendix F contains the September 2006 revised and expanded version of the Instrumentation Binder which will be distributed to the steering committee in Billings, Montana, in October 2006. Eventually this binder will contain all the standardized attitude and achievement assessment instruments to be used for the September 2007 field testing. Electronic versions of all forms are available to PIs in PDF or Word format.

During the phase III report period site visits to six separate schools were conducted. Classrooms were visited in schools associated with Leech Lake Tribal College, Minnesota (i.e., North School, Cass Lake and Bug-O-Nay-Ge-Shig), Keweenaw Bay Ojibwa Community College, Michigan (i.e., Barkell Elementary and L'Anse Middle), and Southwestern Indian Polytechnic Institute, New Mexico (i.e., Santa Clara Day School). Some classes were teaching a DETS lesson (i.e., pilot testing), others had completed teaching a DETS lesson and finally some



classes were preparing to teach a DETS lesson. Only Bug-O-Nay-Ge-Shig, Minnesota and the Santa Clara Day School in New Mexico were conducting beta tests (i.e., multiple DETS lessons). These visits occurred in the spring of 2006. The other site visits were completed during 2005 while pilot testing was going on. Finally in the spring of 2006, three Montana schools (i.e., Rocky Boy Junior High, Box Elder Junior High and Crossroads Alternative High School) were conducting beta tests although time did not permit them to be part of the site visit schedule. Table 3 below summarizes the extended pilot testing that led up to the beta testing and associated site visits.

| School                | Alignment with        | Use & Participation  | Engagement              |
|-----------------------|-----------------------|----------------------|-------------------------|
|                       | National Science      |                      |                         |
|                       | Standards             |                      |                         |
| Fort Peck Community   | 67% yes on alignment  | 100% easy to use     | 67% engaging            |
| College (5/05)        | with National Science |                      | 33% very engaging       |
|                       | Standards             |                      |                         |
| Southwestern Indian   | 93% yes on alignment  | 60% high student     | 72% lessons were just   |
| Polytechnic Institute | with National Science | participation        | right (neither too      |
| (5/05)                | Standards             |                      | difficult nor too easy) |
| Haskell Indian        | 100% yes on           | 100% easy to use     | 6% unengaging           |
| Nations University    | alignment to National |                      | 81% engaging            |
| (5/05)                | Science Standards     |                      | 13% very engaging       |
| Woodlands Wisdom      | 100% yes on           | 75% high student     | 75% teacher friendly    |
| Leech Lake (5/05)     | alignment to National | participation        |                         |
|                       | Science Standards     |                      |                         |
| Fort Peck Community   | 100% yes on           | 67% easy to use      | 67% engaging            |
| College (9/05)        | alignment to National | 33% very easy to use | 33% very engaging       |
|                       | Science Standards     |                      |                         |
| Keweenaw Bay          | 100% yes on           | 100% high student    | 100% teacher friendly   |
| Ojibwa Community      | alignment to National | participation        |                         |
| College (1/06)        | Science Standards     |                      |                         |

Table 3 Summary of Extended Pilot Tests

The extended pilot testing ended in December 2005. The rolling mini beta tests followed the extended pilot testing and began in January 2006. The concept of "rolling mini" betas accommodated the circumstances that some parts of the curriculum were ready to beta test while other parts were not yet ready for the classroom. Data from rolling mini beta testing consisted of teacher web surveys and site visits. During the Santa Clara Day School site visit in April 2006 the 6<sup>th</sup> grade students were being introduced to the DETS lessons via the pre-knowledge survey. The substitute teacher took the entire class period (50 minutes) to administer and review this pre-



knowledge survey. Unfortunately when the pre-knowledge survey was reviewed it was observed that the students were adjusting their answers to the correct answers. While this was not inappropriate in any way (it was simply a discussion of the "test"), it did "taint" the pre-test and render it unusable in any future pre-post comparisons. This problem of "tainting" was discussed during the June 2006 evaluation presentation at Spirit Lake, North Dakota. Furthermore, when the regular classroom teacher returned there was not a follow-up "post-test". Nonetheless, the regular teacher said that she was successful in implementing the DETS beta test lessons, and that the curriculum was easy to use. There were no components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments) of the DETS lessons that were particularly ineffective or difficult to use. The teacher considered the materials appropriate for their students as well as very engaging for their students. The second beta test teacher at Santa Clara Day School in New Mexico also felt that the DETS material was age appropriate and that the students were very engaged by the materials. The content seemed just right (neither too difficult nor too easy) and the students liked the materials. Like her counterpart, Ms. Brewer said that the DETS materials were very aligned to the National Science Standards. She described her implementation as successful and that the materials were very easy to use. Finally Ms Brewer said that the DETS curriculum was engaging when compared to other science curricula that she had used.

The May 2006 Bug-O-Nay-Ge-Shig School site visit in Minnesota was to John Parmeter's seventh grade class. Mr. Parmeter worked through the engage exercise in a natural and effortless manner. While the students were definitely engaged by the teacher, during the brief student interviews they exhibited a neutral attitude toward the topic of diabetes. On the other hand, when asked what they remembered about earlier lessons, all the students were responsive and mentioned things relating to diet and exercise. For this particular class no pre and post knowledge and attitude surveys were given. Mr. Parmeter felt that the materials were very appropriate for his students and that the students were very engaged by the lessons. Furthermore Mr. Parmeter said that the content was just right for his students, adding that it could have been a bit more hands-on. The lessons were described by this teacher as engaging for his students, easy to use for the teacher and very successful in its implementation. From an observer's perspective the implementation was enthusiastic although the sequence of the lessons was changed from the original curriculum. In future beta and field testing the importance of following lesson sequences will be emphasized. The lessons were viewed as much aligned with the National Science Standards. The second Minnesota teacher, Mr. Peter Bahr, described his students as somewhat engaged by the materials, although they did not seem to like the work. Nevertheless he saw the content as just right for his students (neither too difficult nor too easy). Mr. Bahr was not sure how the materials aligned with the National Science Standards. Finally, although he felt that the materials were easy to use, he felt unsuccessful in his implementation. Mr. Bahr embarked on the beta test quickly, without any professional development opportunities. More familiarization with the DETS curriculum would have helped reduce some of his implementation difficulties.



While there were no beta test site visits to Montana during the spring 2006 school semester, three schools (Rocky Boy Junior High; Box Elder; Crossroads Alternative HS) beta tested the Grades 5-8 DETS material. Ms. Teresa Olson at Rocky Boy Junior High described the DETS materials as age appropriate for her students. She said that her students seemed to like the lessons and were somewhat engaged. The content was seen as just right (neither too difficult, nor too easy). Ms. Teresa Olson felt that the DETS materials were very aligned with the National Science Standards. She described her implementation as successful. The materials were easy to use and she considered this curriculum as engaging compared to other science curricula that she had used. Ms. Temina Olson at Box Elder Junior High also described the DETS materials as age appropriate for her students. She said that her students seemed to like the lessons and were somewhat engaged. The content was seen as just right (neither too difficult, nor too easy). Ms. Temina Olson felt that the DETS materials were very aligned with the National Science Standards. She described her implementation as successful. Ms. Temina Olson considered this curriculum as engaging compared to other science curricula that she had used but, unlike her counterpart at Rocky Boy, she said that the materials were difficult to use. Mr. Richard Jones at Crossroads Alternative High School said that the DETS materials were age appropriate for his students. However, unlike his counterparts at Rocky Boy and Box Elder, Mr. Jones said that the content was too difficult for his students, adding that his students seemed to dislike the DETS lessons. He attributed this to a vocabulary and reading level that was somewhat higher than his students were ready for. Nonetheless Mr. Jones felt that the DETS materials were very aligned with the National Science Standards. He described his implementation as successful. Although Mr. Jones felt that the materials were less engaging than other science curricula he had used, the materials were easy to use.

At Rocky Boy 93% of the students said that the beta test lessons were "just right", with the remaining 7% saying that they were too easy. Student perception of the effectiveness of the five beta test lessons was high. On average 75% of the students said that they learned some things or a lot of things from these lessons. Table 4 summarizes student perceived learning.



Table 4Student Perceived Learning: Rocky Boy Junior High

| Lesson Title                               |                      |                              |                          |                    |
|--|----------------------|------------------------------|--------------------------|--------------------|
|  | I learned<br>nothing | I learned<br>a little<br>bit | I learned<br>some things | I learned<br>a lot |
|  | 1                    | 2                            | 3                        | 4                  |
| LESSON ONE: History<br>in the Making       | 3.5%                 | 34.5%                        | 37.9%                    | 24.1%              |
| LESSON TWO: Focus on<br>Diabetes           | 3.5%                 | 17.2%                        | 44.8%                    | 34.5%              |
| LESSON THREE: Health<br>is Life in Balance | 0%                   | 23.3%                        | 43.3%                    | 33.3%              |
| LESSON FOUR: The<br>Community Care Clinic  | 10.3%                | 10.3%                        | 27.6%                    | 51.7%              |
| LESSON FIVE: Taking<br>the Message Home    | 3.6%                 | 21.4%                        | 46.4%                    | 28.6%              |

At Box Elder 94% of the students said that the beta test lessons were "just right", with the remaining 6% saying that they were too easy. Student perception of the effectiveness of the five beta test lessons was high. On average 69% of the students said that they learned some things or a lot of things from these lessons. Table 5 on the next page summarizes student perceived learning for Box Elder. There was no perceived learning data from Crossroads Alternative High School.



Table 5 Student Perceived Learning: Box Elder High

| Lesson Title          |           |                |             |           |  |
|-----------------------|-----------|----------------|-------------|-----------|--|
|                       | I learned | I learned      | I learned   | I learned |  |
|                       | nothing   | a little       | some things | a lot     |  |
|                       |           | bit            |             |           |  |
|                       | 1         | 2              | 3           | 4         |  |
| LESSON ONE: History   | 0 %       | 41.2 %         | 35.3 %      | 23.5 %    |  |
| in the Making         | 0 /0      | 41.2 /0        | 33.3 /8     | 23.3 /0   |  |
| LESSON TWO: Focus on  | 0 %       | 25.0 %         | 50.0 %      | 25.0 %    |  |
| Diabetes              | U /0      | 23.0 /0        | 30.0 /8     | 23.0 /0   |  |
| LESSON THREE: Health  | 0 %       | 22.2 %         | 55.6 %      | 22.2 %    |  |
| is Life in Balance    | U /0      | <i>∠∠.∠</i> /0 | 55.0 %      | 22.2 /0   |  |
| LESSON FOUR: The      | 0 %       | 35.3 %         | 41.2 %      | 23.5 %    |  |
| Community Care Clinic | U 70      | <b>33.3</b> %  | 41.2 70     | 23.3 %    |  |
| LESSON FIVE: Taking   | 11.1 %    | 22.2 %         | 29.0.0/     | 27.8 %    |  |
| the Message Home      | 11.1 %    | <b>∠∠.∠</b> %  | 38.9 %      | 21.0 %    |  |

The three Montana beta test sites provided pre-post knowledge survey data and pre-post attitude survey. This provided the opportunity to do six pre-post survey comparisons. Although not statistically significant, all four comparisons showed improvement from the pre survey to the post survey. The two statistically strongest improvements were for the Box Elder knowledge survey (t = 1.58; p = .061) and the Rocky Boy attitude survey (t = 1.47; p = .073). Figures 6 and 7 for Crossroads Alternative High School show absolutely no change from pre survey to post survey for both knowledge and attitude. Crossroads is a new implementing school relative to Box Elder and Rocky Boy. In this regard the lack of shift from pre to post may be related to a lower level of implementation relative to the other two Montana schools. These results are illustrated in Figures 2 through 7 below. Additional data tables may be found in Appendix E.





















The extended pilot test data as well as the rolling mini beta test data was reported back to the principal investigators at the quarterly steering committee meetings. This timely reporting ensured that critical processes (e.g., lesson and unit revisions) were attended to. Although the planning schedule had slipped from the original timetables, extending both pilot testing and beta testing provided useful data that kept the curriculum development on track relative to goals, key concepts (i.e., enduring understandings) and pedagogical strategy (i.e., the application of the 5E model).

In addition to the evidence reported above (see Appendix E for the complete data record), the September 2006 External Advisory Committee meeting in Denver further corroborates these findings. In particular, the materials reviewed at the 2006 Denver EAC meeting concluded that the curriculum materials are solidly rooted in the 5E model and closely connected to key diabetes concepts (i.e., enduring understandings). While there are important and non-trivial organizational, formatting and graphic design issues to be resolved and implemented for these materials, the expected output of a diabetes curriculum for Native Americans that focuses on health is life in balance is happening despite the schedule setbacks. Furthermore there is good evidence as reported above that these materials are well aligned with National Science Standards, generally liked by the students, and generally perceived as engaging and easy to use. Also, two reviews (June 2006 and September 2006) of the curriculum materials show adherence to key concepts. The three curriculum goals are clearly stated at the outset, and the 5E pedagogical model is visible and consistently applied throughout the K-12 curriculum. Finally, earlier prepost evidence of impact (see Phase II Evaluation Report) has been positive. Also EAC members expressed some concern about time estimates given for lesson and units. Questions of impact and details about lesson time will be further addressed in the September 2007 field test.

The September 2006 Instrumentation Binder was revised and expanded to reflect new instrumentation. Knowledge surveys from the 5-8 curriculum subcommittee were added as was a K-4 attitude survey. Once the final part of the beta testing is complete by December 2006 there will be a full binder of all the instrumentation associated with DETS lessons that have been taught during the rolling mini beta tests. Items from these instruments will be examined statistically (e.g., item discrimination indices; item reliability via Cronbach's alpha). Dr. Coulson, the external evaluator whose background is in psychometrics, will develop a standardized subset of knowledge survey items for all grade level assessments. These standardized DETS assessment packets will consist of content related items as well as more general age-appropriate science knowledge items. During the early part of 2007 Dr. Coulson will work closely on the standardized assessment packet with BSCS who are producing the final pre-production materials to be field tested in September 2007.

The field test evaluation research design will combine sites associated with the eight TCUs, as well as recently contacted sister sites. The sister sites allow the researcher to study variations in level of implementation as well as establish more generalizable results from a wider geographic distribution that will include sister sites from the northeast and southeast. Final field



test sampling will be planned in the spring of 2007. This planning process will involve the distribution of field test packets (based on the current beta test packet) and will include standardized knowledge surveys and attitude surveys. In coordination with PIs at the TCUs school participation lists will be developed, where schools will be assigned (whenever possible) DETS lessons to teach. While formal control groups would not be possible, comparison sites will be designated by level of implementation data. In the field test design the presence of comparison sites will allow for impact assessment when separated out by level of implementation measures (e.g., amount of professional development; familiarity with DETS curriculum; amount of time with the curriculum). Furthermore, because the attitude measures during the beta test have been standardized in format and with general items from the TOSRA (Test of Science Related Attitude) scale, baseline data from the beta test will be available during the field test analyses.

Main evaluation design features of the field test include: 1) standardized pre and post surveys; 2) level of implementation measure; and 3) comparison groups. The pre and post measures will look at student gain as a function of level of implementation. An *implementation composite* is being developed. This composite measure will consist of data from site visits from the external evaluator, reports from the principal investigators at each of the TCUs and an endof-semester survey distributed to teachers through the PIs via the web. The implementation measure will permit the sample to be divided into *high* implementers and *low* implementers such that a two way analysis of variance (i.e., one within subject variable, and one between subject variable) would look at gain and its interaction with implementation. Where comparison groups (voluntary by TCU site and sister sites) are available, additional two way ANOVAs will be conducted using the implementation composite as a covariate (i.e., two way ANCOVA).

The relationship between achievement and attitude will be examined with a multiple regression framework. Achievement will function as a dependent measure with attitude, implementation level as well as school characteristics (e.g., percent Native American; size of school) serving as independent variables.

Where non-commensurate variables need to be compared for high vs. low levels of implementation effect sizes will be calculated and graphed. Effect sizes are standardized scores and in this regard are scale independent.

Finally data patterns will be studied using a variety of graphical techniques. For example, box-and-whisker plots which show the median, interquartile range, range and outliers can effectively be used to visually describe the differences between DETS classes and comparison classes, or between low implementing classes and high implementing classes.

Scheduling site visits and distribution of instrumentation can be problematic for a large national curriculum project. In that regard scheduling sign-up and status sheets are included in the September 2006 Instrumentation Binder. These forms contain useful information for PIs



regarding data requests from the external evaluator as well as a project data timeline to assist PIs in anticipating and managing these data requests. In addition the revised and expanded September 2006 *Instrumentation Binder* contains checklists for teachers and PIs that will be participating in field testing as well as status matrix to help track names of participating schools, number of students involved, when DETS lessons are being taught, and whether or not pre-tests and post-tests have been administered.

The phase III evaluation timeline has run for 16 months from May 1, 2005 through September 30, 2006. While the external evaluator has contributed time to other DETS related activities such as overseeing video development, Table 6 below summarizes expenses for only evaluation related activities.

| Cost Category           | Expenditures         |
|-------------------------|----------------------|
| Direct Labor            |                      |
| Consultant              | \$60,000 (600 hours) |
| Staff                   | \$7,200 (240 hours)  |
| Data Entry              | \$5,200 (260 hours)  |
| Travel                  |                      |
| Transportation/per diem | \$6,800 (5 trips)    |
| Miscellaneous           |                      |
| Supplies/services       | \$1,700              |
| Indirect Costs          |                      |
| Fringe, overhead, G&A   | \$20,225             |
| Total                   | \$101,125            |

Table 6 Cost Summary of DETS Evaluation Related Activities (From May 1, 2005 through September 30, 2006)



#### SUMMARY and RECOMMENDATIONS

The phase III evaluation work began in May, 2005 and concluded in September 2006. The beta test and field test components of this phase were designed to track the critical processes of the DETS curriculum development project. Throughout the beta test phase which included five national level steering committee meetings, 16 steering committee conference calls, 14 evaluation subcommittee conference calls and two EAC meetings in Denver, progress was shown on the three phase III questions: 1) Is the DETS program being developed as planned? 2) Are DETS program critical processes being implemented? 3) Has the DETS curriculum been developed into the expected output?

Throughout phase III the DETS program has attended to a general focus and its three main goals. Beta test data, conference calls and documents (e.g., Instrumentation Binder in Appendix F) distributed at quarterly steering committee meetings insured that the general focus of *health is life in balance* and the three DETS goals relating to community health, the science of diabetes and science careers remained explicit parts of the curriculum. The key concepts document jointly produced by the three curriculum subcommittees (i.e., K-4; 5-8 and 9-12) was derived from the three goals. The key concepts, or enduring understandings, led directly to the development of evaluate activities and the associated lessons. Furthermore by standardizing lesson pedagogy on the 5E model it ensured that a "backwards design" approach was used based on the enduring understandings. The data record during phase III is very strong that the 5E model constituted the guiding foundation for developing the curriculum as planned relative to overall mission (i.e., *health is life in balance*) and three overarching goals (i.e., community health, science of diabetes, careers in science).

Classroom site visits and teacher interviews provided data on whether the DETS program critical processes were being implemented. Specifically, site visit classroom observational data and teacher web surveys resulted in eleven separate pilot test reports and five separate beta test reports to the PIs at the TCUs. This data shows that the curriculum material is aligned with the National Science Standards, follows the 5E format and for the most part is engaging to the students. Four curriculum reviews (June 2006 and September 2006) show that the materials are in fact following closely the 5E pedagogical model, and linking lesson activities to the key concepts of enduring understandings. The data record is clear that the processes (e.g., National Science Standards, use of the 5Es) critical to implementing DETS have been followed.

While the DETS curriculum is not yet in final form due to schedule delays discussed earlier in this report, the evidence is positive that it is moving toward its expected output of a national level replacement modularized curriculum. As beta testing has progressed lesson time estimates have gotten more accurate and realistic. This permits potential users the opportunity to plan the fit of the DETS materials into their existing curriculum. Format improvements have better aligned the central metaphor (i.e., *health is life in balance*) with specific content. Throughout the curriculum reviews, the role of this central metaphor and the presence of the



three DETS goals has been evident. Indeed this has been both the most difficult aspect and the most rewarding aspect of the DETS curriculum development program. That is, the original development effort in 2004 contained more that 100 unit/lessons that were un-unified relative to the central theme and three goals. Furthermore these numerous unit/lessons represented the intellectual efforts of eight Tribal Colleges and Universities (TCUs) not accustomed to working collaboratively. The fundamental success thus far is that since 2004, through careful and sometimes painstaking collaborations the eight TCUs have managed to focus all the disparate unit/lessons into 15 or so unit/lessons. These efforts have resulted in a curriculum that is not only focused but coherent relative to central theme, three goals and the enduring understandings (i.e., key concepts). Finally the DETS scientific review committee (SRC) has reviewed all the material for accuracy. Consequently from where the DETS curriculum development started in late 2003 and early 2004 it has come a tremendous distant toward its expected output, generating a curriculum that is focused, coherent and rigorous.

In summary, the data in this report is based on the completion of six specific phase III beta test tasks (see Table 2): 1) recommend beta test evaluation design strategy; 2) present evaluation design strategy to steering committee (including a practical timeline); 3) develop an instrumentation binder for the beta test; 4) participate in the December 2005 EAC meeting; 5) conduct beta test site visits (spring 2006); 6) generate beta test reports (spring 2006 and Fall 2006). The differential pace of lesson development across the eight TCUs resulted in an extended pilot test period and schedule delays for starting the beta testing. At the December 2005 External Advisory Committee meeting it was recommended that field testing not begin until September 2007. In its place rolling mini betas were designed to run from January 2006 through June of 2007. This schedule was further modified at the September 2006 EAC meeting, where the Spring 2007 beta testing and September 2006 EAC review recommendations to produce final pre-production materials for the September 2007 field tests. At the October 2006 steering committee meeting the September 2006 EAC review recommendations to produce final pre-production materials for the September 2007 field tests. At the October 2006 steering committee meeting the September 2006 EAC schedule revisions will be presented, discussed, adjusted (if needed) and approved.

At this stage the following recommendations are made:

- 1. Add a nationally focused teacher professional development component;
- 2. Task the external evaluator to work with BSCS to develop a standardized assessment packet that would be part of the final product;
- 3. Develop a unified strategy for generalizing cultural components and at the same time elicit and apply specific cultural components from within Native American communities where the DETS curriculum will be taught;
- 4. Unify lessons via graphic design elements (e.g., DETS logo; K-12 pagination);



- 5. Write a short teacher oriented "navigation" section for the entire K-12 curriculum;
- 6. Plan and obtain commitments from all school field test commitments by early June 2007 for September 2007 field test;
- 7. Integrate data from ethnographic component into curriculum materials;
- 8. Maintain a simple, clean, concise appearance to the materials (i.e., keep it teacher friendly and practical for teachers to use).









# Appendix A

For Phase III DETS Evaluation Report September 2006

## **Data Forms**

Pilot Test survey form (paper-based)Pilot Test survey form (web-based)Beta Test survey from (web-based)

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#### DETS Pilot Test Lesson Evaluation Form for Lesson:

<u>How did it go?</u> Please take a moment to complete this rating form on the main elements of the DETS lesson that you have recently test taught to your students. The survey is quick-and-easy to complete, and will provide the curriculum developers with a good sense of what is working and what needs to be improved.

| Name   | :: School:                     |                         | Grade:   |        | Date of les | son: _ |              |
|--------|--------------------------------|-------------------------|----------|--------|-------------|--------|--------------|
| Listed | d duration of lesson in minute | es:                     |          |        |             |        |              |
| Actua  | al duration of lesson in minut | es:                     |          |        |             |        |              |
|        |                                |                         |          |        |             |        |              |
| The le | esson components below wer     | e: very                 | clear    | clear  | uncl        | ear    | very unclear |
| 1.     | Lesson Goal                    | ſ                       | ]        |        |             | J      |              |
| 2.     | Lesson Objectives              | ĺ                       | ]        |        |             | ]      |              |
| 3.     | Vocabulary                     | ſ                       | 3        |        |             | ]      |              |
| 4.     | Material List                  | ſ                       | 3        |        |             | ]      |              |
| 5.     | National Science Standards     | <b>s</b> (              | 3        |        |             | ]      |              |
| 6.     | American Indian                |                         |          |        |             |        |              |
|        | Content Standards              | ſ                       | 3        |        |             | ]      |              |
| 7.     | State Standards                | ſ                       | ]        |        |             | ]      |              |
| 8.     | Assessment                     | ĺ                       | 3        |        |             | ]      |              |
| Overa  | all                            |                         |          |        |             |        |              |
| 9.     | Student participation was:     |                         | 🗖 low    |        | 🗆 average   | 2      | 🗖 high       |
| 10.    | Diabetes awareness conten      | t was:                  | 🗆 insuff | icient | 🗆 adequat   | te í   | a excessive  |
| 11.    | Science content was:           |                         | 🗆 insuff | icient | 🗆 adequat   | te í   | 🗆 excessive  |
| 12.    | For teachers lesson was:       | 🗖 teacher               | friendly | 🗆 co   | onfusing    | 🗖 too  | complicated  |
| 13.    | For students lesson was:       | 🗖 too easy              | '        | 🗖 ju   | ist right   | 🗖 too  | difficult    |
| 14.    | Lesson length was:             | 🗖 too long              |          | 🗖 ju   | ist right   | 🗖 too  | short        |
| 15.    | Also, lesson was:              | l other:                |          |        |             |        |              |
| 16.    |                                | □ supporti<br>□ other:_ | 2        |        | inservice   |        | sessments    |
| 17.    | Briefly comment on lesson s    | strengths:              |          |        |             |        |              |

18. Briefly comment on areas that need improvement:

## DETS Pilot Test Teacher Web Survey



**Introduction**: This survey should take about 10 minutes. The purpose of the survey is to document your perception of the DETS curriculum pilot test lessons you have taught thus far. Your confidential responses will help provide candid feedback on this development phase of the DETS curriculum - thanks!

| Teacher Name:                        |                             |                  |             | Grade Level:  |
|--------------------------------------|-----------------------------|------------------|-------------|---|
|                                      |                             |                  |             |   |
| School:                              |                             |                  |             | State:  |
|                                      |                             |                  |             |   |
| Background Data                      |                             |                  |             |   |
| A. How many DETS lessons             | s have you taug             | ht during the Pi | lot Test Ph | ase?  |
| <u> </u>                             | . 3                         | <u> </u>         | 05          | ⊂more than 5  |
| B. About how many of your            | students parti              | cipated in the l | DETS pilot  | lessons?  |
| 1 to 10                              | D11 to 20                   | <u> </u>         | <u> </u>    | ○ More than 40  |
| C. Briefly list the <i>topics</i> ar | nd <i>names</i> of the      | e DETS lessons   | that you to | ught.   |
|                                      |                             |                  |             |   |
| Survey Questions                     |                             |                  |             |   |
|                                      |                             |                  |             |   |
| 1. Overall, how would you r          | ate the conten <sup>t</sup> | t of these lesso | ns for your | students?   |
| C                                    | )too easy                   | ⊖just right      | <u> </u>    | lifficult   |
|                                      |                             | -                |             | ls, materials list, vocabulary,<br>larly effective and easy to use? |
|                                      |                             |                  |             |   |
|                                      |                             |                  |             |   |
| 3. Overall, which lesson co          | mponents (e.g.,             | goal statement   | s, standaro | ls, materials list, vocabulary,                                     |

cultural content, science content, assessments, etc.) were particularly ineffective and difficult t

| use? |  |  |
|------|--|--|
|      |  |  |
|      |  |  |
|      |  |  |

4. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

|        | Oyes               | <u> </u> |  |  |
|--------|--------------------|----------|--|--|
| Please | briefly elaborate. |          |  |  |
|        |                    |          |  |  |
|        |                    |          |  |  |
|        |                    |          |  |  |

6. In general what areas of the DETS lessons that you taught need improvement?

5. In general what have been the strengths of the DETS lessons thus far?

- 7. Please take a final moment to provide us with a couple of overall ratings on your experiences wit the DETS curriculum thus far.
  - a. From a teacher's perspective how easy-to-use is the DETS curriculum?

very difficult to use

Odifficult to use Oea

Oeasy to use Overy easy to use

b. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?

Overy unengaging Ounengaging

ging Oengaging

very engaging

8. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.



### DETS Beta Test Teacher Web Survey

**Introduction**: This Beta survey should take about 15 minutes. The purpose of the survey is to document your perception of the DETS curriculum beta test lessons you have taught in '06 (i.e.: from January '06 through June '06). Your confidential responses will help provide candid feedback on this development phase of the DETS curriculum - thanks!



| Teac  | her Name:   | Grade Level:   |
|-------|---|--|
| Scho  | ol:   | State:   |
|       | und Data  |  |
| A. H  | ow did you get involved teaching DETS lessons?<br>volunteered word-of-mouth mandate fro<br>other:   | om principal/superintendent  |
| B. W  | nat DETS-related professional development opportunities<br>onone ointroductory inservice on diabetes odvo<br>teacher training on DETS curriculum other: | s have you had since September '05?<br>anced inservice on diabetes |
|       | proximately how many hours of DETS-related profession<br>I since May '05?   | al development opportunities have you                              |
| D. He | ow many DETS lessons have you taught during this Phase  |  |
| E. At | out how many of your students participated in the DETS  | to 40 OMore than 40  |
| F. Ap | proximately what percentage (number only) of your DET:  | S students were Native American?                                   |
| •     | proximately how many classroom hours (number only) hav<br>ce January '06?   | ve you spent teaching DETS lessons                                 |

| H. Briefly list the <i>topics</i> and <i>names</i> of the DETS lessons that you taught.  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
| I. Briefly tell us approximately how many minutes you took to teach each lesson. Generally, was this longer, shorter or about the time that was indicated in the curriculum materials?   |  |  |  |  |  |
|  |  |  |  |  |  |
| Survey Questions   |  |  |  |  |  |
| 1. How age appropriate were the DETS materials for your students?.<br>Very inappropriate Oinappropriate Oappropriate Overy appropriate   |  |  |  |  |  |
| 2. Please rate the level of engagement of your students while you were teaching these lessons. Onot engaged Osomewhat engaged Overy engaged  |  |  |  |  |  |
| 3. Overall, how would you rate the content of these lessons for your students?   |  |  |  |  |  |
| Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)?  |  |  |  |  |  |
|  |  |  |  |  |  |
| 4. How well did your students like the DETS lessons?   |  |  |  |  |  |
| Really disliked them Obsliked them <p< td=""></p<> |  |  |  |  |  |
| 5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly effective and easy to use?   |  |  |  |  |  |
|  |  |  |  |  |  |
| 6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly ineffective and difficult to use?  |  |  |  |  |  |
|  |  |  |  |  |  |
| 7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?   |  |  |  |  |  |
| Onot aligned Osomewhat aligned Overy aligned Onot sure Please briefly elaborate.   |  |  |  |  |  |
| 8. In general what have been the strengths of the DETS lessons thus far?   |
|--|
| 9. In general what areas of the DETS lessons that you taught need improvement?   |
| <ul> <li>10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far. <ul> <li>a. How successful were you in implementing the DETS lessons?</li> <li>very unsuccessful</li> <li>unsuccessful</li> <li>successful</li> <li>very successful</li> <li>unsuccessful</li> <li>successful</li> <li>very successful</li> <li>very difficult to use</li> <li>difficult to use</li> <li>easy to use</li> <li>very easy to use</li> <li>very easy to use</li> <li>compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?</li> <li>very unengaging</li> <li>unengaging</li> <li>engaging</li> <li>very engaging</li> <li>d. Overall how strong was the Native American cultural framework (e.g. Native American examples, links to Native American culture.)?</li> <li>very strong</li> <li>strong</li> <li>weak</li> <li>very weak</li> </ul> </li> </ul> |
| 11. Please describe what kind of support or assistance you would need to fully implement the DETS  |
| curriculum.  |
| Thanks for your help!  |
| Submit Reset   |





## Appendix B

For Phase III DETS Evaluation Report September 2006

## **Steering Committee Evaluation PowerPoints**

May '05 (Leech Lake) September '05 (Keweenaw Bay) January '06 (Bellingham) April '06 (Albuquerque) June '06 (Spirit Lake) Page B-1 Page B-5 Page B-8 Page B-11 Page B-13























|       | Topics   | Author                                    |
|-------|--|---|
| K – 4 | Everybody's Lunch (7 MC; 3 SA)<br>Traditional Diet & Exercise (8MC; 4 SA)<br>Life Science (10 MC; 36 SA)<br>Making Healthy Choices (10 MC; 6 SA)<br>Meat & Dairy (8 MC; 8 SA)<br>Food Needs of Humans (8 MC; 8 SA) | Mary Hindelang<br>Kenan Metzger           |
| 5 – 8 | Art and Diabetes (12 MC)<br>Fit and Sit Check (6 MC)<br>Diabetes Pre/Post Test (9 MC; 1 SA)<br>Body Systems (15 MC; 4 SA)  | Malinda Pekarcik<br>Janet Belcourt's Team |



# Field Test Design Considerations Data – 4 data elements Achievement Attitude Teacher web survey Classroom observations Timing Basic design

 Pre/post by levels of implementation with limited control classrooms

#### Assistance from Curriculum Subcommittees

- Receiving multiple choice and short answer questions for each curriculum unit
- Receiving unit outlines and lesson activities to create specificity for attitude questions
- Working with Lynn (K-4), Janet (5-8) and Bill (9-12) to coordinate evaluation needs

#### What I Need – Soon ("...a little help from my friends...") Items & Content Outlines Help from Lynn, Janet, and Bill: achievement test items and unit/lesson outlines Help from PIs and their staff • Coordinating matrix: School-x-Teacher-x-Grade-x-Class matrix • Distribution of pre/post tests with implementation of DETS lessons • Teacher commitment to provide data • Site visits during DETS lessons



#### Summary "Scheduling and Timeline Binder"

- Sampling classes, printing tests
- Coordinating pre- and post- tests (attitude and achievement) with units
- End-of-semester Online web implementation survey for teachers
- Being flexible yet systematic













|             | Jan-19-05 | May-19-05 | Sept-21- 05 |
|-------------|-----------|-----------|-------------|
| Stone Child | 1         | 19.2 6    | ~           |
| Fort Peck   | 1         | 1         | ~           |
| KBOCC       | 1         |           | ~           |
| SIPI        | 1         | 1         | 1           |
| Haskell     | 1         | 1         | 1           |
| Cankdeska   |           |           | 1           |
| NWIC        |           |           | 242 - 2     |
| Leech Lake  |           | 1         |             |





#### WANTED: Achievement and Attitude

- 3 achievement items/lesson
- Content outlines for attitude survey
- Balance across health and science
- Touchstone: Health is Life in Balance



#### Pre-post testing (Achievement)

- Sufficient content to span
- Measure achievement <u>at unit level</u>
- Items sampled from lessons for content coverage
- Keep response burden low
- About 15 multiple choice items



#### Pre-post testing (Attitude) Implementation measurement Fidelity of Implementation – a Based on lesson level and unit level concomitant variable topic outlines A composite variable Measure attitude <u>at unit level</u> Measured via web survey Topic outlines provide Doug with Measured via site visits curriculum language Measured via classroom reports on Keep response burden low **DETS** materials R















Keweenaw Bay Ojibwa Community College September 21, 2005



| DIABETES EDUCATION IN TRIBAI<br>K-12 CURRICULUM<br>NOVEMBER 20  | I MAP   | JOLST                     | NOJEC        |             |              |             |              |             |             |               |              |             |             |                |               |
|---|---|---------------------------|--------------|-------------|--------------|-------------|--------------|-------------|-------------|---------------|--------------|-------------|-------------|----------------|---------------|
| Unit Title<br>(Titles of Units to be BETA Tested)   | # Class Periods                                     | Supplement<br>Replacement | Kindergarten | First Grade | Second Grade | Third Grade | Fourth Grade | Fifth Grade | Sixth Grade | Seventh Grade | Eighth Grade | Ninth Grade | Tenth Grade | Eleventh Grade | Tweffth Grade |
| K-4 SUBCOMMITTEE  |   |                           |              |             |              |             |              |             |             |               |              |             |             |                |               |
| The Road Dates, A Colord B Banco<br>Landscale and Dates. – The Road Dates<br>2. Input new of Water<br>Colorador and States (Colorador States)<br>2. Input new of Water<br>Colorador (Colorador States)<br>4. Negative and Theory (Colorador States)<br>4. Negative and Theory (Colorador States)<br>4. Negative and Theory (Colorador States)<br>7. Dia Colorador and States (Colorador States)<br>7. Dia Colorador and States (Colorador States)<br>7. Dia Colorador (Colorador States)<br>7. | 1<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5 | R/S<br>R/S<br>R/S         | x            | x           | x            | x<br>x<br>x | x            |             |             |               |              |             |             |                |               |
| Lunch in Available<br>The Round Dance is a Friendship Dance:<br>Balancing Self and Others<br>Kindergarten Lessons:<br>Setting Goals for Good Health<br>Myself and Others: Preventine Conflicts  | 6   | R/S                       | x            |             |              |             |              |             |             |               |              |             |             |                |               |
| The Body's Needs: Balancing Food, Water, Rest, and<br>Physical Activity   | 5   | R/S                       |              | x           | х            | x           |              |             |             |               |              |             |             |                |               |
| Physical Activity<br>Grade 1 & 2 Lessons<br>Healthy Friendships<br>Understanding and Handling Bullying<br>Grade 3 & 4 Lessons   | 5/4<br>5/4  | R/S                       |              | x           | x            |             | x            |             |             |               |              |             |             |                |               |
| Grade 3 & 4 Lessons<br>Making Healthy Choices – Third Grade<br>Setting Goals for Good Health – Third Grade  | 2/1   | K/S                       |              |             |              | x           | X.           |             |             |               |              |             |             |                |               |



|   |                 |                           |                 | CULUN<br>BER 20 |              |             |              |             |             |               |              |             |             |                |               |
|---|-----------------|---------------------------|-----------------|-----------------|--------------|-------------|--------------|-------------|-------------|---------------|--------------|-------------|-------------|----------------|---------------|
| Unit Title<br>(Titles of Units to be BETA Tested)   | # Class Periods | Supplement<br>Replacement | K indergar te n | First Grade     | Second Grade | Third Grade | Fourth Grade | Fifth Grade | Sixth Grade | Seventh Grade | Eighth Grade | Ninth Grade | Tenth Grade | Eleventh Grade | Twelfth Grade |
| 9-12<br>SUBCOMMITTE   |                 |                           |                 |                 |              |             |              |             |             |               |              |             |             |                |               |
| Science Unit:<br>The Cell   | 2               | s                         |                 |                 |              |             |              |             |             |               |              | x           |             |                |               |
| Careers   | 2               | S                         |                 |                 |              |             |              |             |             |               |              | Х           |             |                |               |
| Science Unit:<br>Circulation, Respiration, Digestion, Stress and<br>Diabetes  | 4               | s                         |                 |                 |              |             |              |             |             |               |              | x           |             |                |               |
| Health Education Unit:<br>Culture and History   | 5               | s                         |                 |                 |              |             |              |             |             |               |              | x           |             |                |               |
| Science Unit:<br>Energy Production and Utilization  | 2               | s                         |                 |                 |              |             |              |             |             |               |              | x           |             |                |               |
| Science Unit:<br>Diabetes as seen by the Community:<br>Introduction to Qualitative Research Methods   | 6               | s                         |                 |                 |              |             |              |             |             |               |              |             | x           | x              |               |
| Civics and Government Unit:<br>Lobbying for the Health of It  | 5               | s                         |                 |                 |              |             |              |             |             |               |              | x           | x           | x              |               |
| Science Unit:<br>Diabetes as Life Science 1: Prevention<br>#1 Life in balance and type 2 diabetes<br>#2 Dynamic feedback systems, insulin resistance,<br>and type 2 diabetes<br>#3 Risk factors for type 2 diabetes<br>#4 Prevention of type 2 diabetes | 7-9             | S or<br>R                 |                 |                 |              |             |              |             |             |               |              | x           | x           | x              | x             |
| General Unit (science, health ed, PE, etc.)<br>Using SMART Goals  | 2               | s                         |                 |                 |              |             |              |             |             |               |              | x           | x           | x              | x             |

















#### When and Where of Beta Forms

- Throughout current academic semester
- Available via email or online submissions at Doug's web location
- Self initiated pre-post assessments (e.g., Carolee's "pre-post journals" and Kenan's pre-post classroom tests)



#### Update on Ethnographic Study

Michelle Chino and LeMyra DeBruyn













Southwestern Indian Polytechnic Institute; April 11, 2006









Southwestern Indian Polytechnic Institute; April 11, 2006

















#### Fall 07 Beta Test Components

- Teacher web survey
- Teacher-made Knowledge Survey (pre/post)
- Doug-made Attitude Survey (pre/post)
- Site visits by Doug
- Participation by sister sites when possible
- Data to PIs, then to Doug for analysis











## Update on Ethnographic Study • LeMyra DeBruyn and Michelle Chino





## Appendix C

For Phase III DETS Evaluation Report September 2006

## **External Advisory Committee Evaluation Power Point**

Denver '05 PowerPoint 2006-2007 Timeline Slide Page C-1 Page C-3





| Structu                   | re of doo                           | cument                              |  |  |  |  |
|---------------------------|-------------------------------------|-------------------------------------|--|--|--|--|
| Over                      | view of DETS P                      | roject                              |  |  |  |  |
| Miss                      | Mission of DETS Project             |                                     |  |  |  |  |
| Purpos                    | se of the DETS                      | Project                             |  |  |  |  |
| Curriculum<br>Goal 1      | Curriculum<br>Goal 2                | Curriculum<br>Goal 3                |  |  |  |  |
| 4 Key Concepts<br>K-4 Key | 3 Key Concepts                      | 2 Key Concepts                      |  |  |  |  |
| Objectives                | Objectives<br>5-8 Key<br>Objectives | Objectives<br>5-8 Key<br>Objectives |  |  |  |  |
| 9-12 Key<br>Objectives    | 9-12 Key<br>Objectives              | 9-12 Key<br>Objectives              |  |  |  |  |

#### Mission of DETS Project

- Increase the understanding of health, diabetes, and maintaining life in balance among American Indian / Alaska Native children, families, and communities.
- Increase the number of American Indian / Alaska Native people in science or health careers.

#### **Overview of DETS Project**

The DETS Project is part of a national effort to decrease the incidence and improve the care of type 2 diabetes among American Indians and Alaska Natives. The DETS Project is a K-12 curriculum that has a multidisciplinary approach. The DETS curriculum consists of units that incorporate national education standards, inquiry learning, and American Indian / Alaska Native cultural and community knowledge.

#### Purpose of DETS Project

Develop and implement a schoolbased diabetes curriculum that supports the integration of American Indian / Alaska Native cultural and community knowledge with diabetes-related scientific knowledge.

#### **Curriculum Goal 1**

Increase the understanding of health, diabetes, and maintaining life in balance among American Indian / Alaska Native students.

#### Key Concepts for Goal 1:

- Positive health is a continual process of maintaining life in balance.
- Diabetes is an imbalance of health at many levels.
- Some risk factors and imbalances contribute to the likelihood of diabetes.
- Individuals, families, and communities can maintain health and balance and prevent type 2 diabetes.

#### **Curriculum Goal 2**

Increase American Indian / Alaska Native students' understanding and application of scientific and community knowledge about health, diabetes, and maintaining balance, and of the processes of development of that knowledge.

#### Key Concepts for Goal 2:

- Key Concepts for Goal 2:
  Health, preventing and treating diabetes, and maintaining balance and enhancing health require both scientific and community knowledge.
  Individuals, families, and communities can effectively apply scientific and community knowledge to maintain health and prevent type 2 diabetes.
  Both scientific and community knowledge develop onver time knowledge develop over time.

#### **Curriculum Goal 3**

Increase interest in science and health professions among American Indian / Alaska Native youth.

#### Key Concepts for Goal 3:

- Science and health professionals can work with people and communities to prevent and care for type 2 diabetes.
  American Indian / Alaska Native students can and do have future careers in science and health.

| Jan '06 – June '06  | July '06 – Aug '06   | Sep '06 – Dec '06   | Jan '07 – Aug '07<br>Jan '07 – June '07  | Sept. '07                                   |
|---|--|---|--|---|
| Beta Testing<br>• pre/post<br>achievement<br>• pre/post attitude<br>• implementation<br>survey<br>• classroom<br>observations | Concord ant<br>Committee I<br>• align goals to key<br>concepts<br>• align key concepts<br>to objectives<br>• align objectives to<br>unit titles<br>• edit for consistent<br>look-and-feel<br>• fully integrate<br>cultural and<br>scientific | Field Test I<br>• Ready Sites<br>• Sister Sites<br>• Systematic<br>comparison<br>groups<br>• Pre/post<br>measures<br>• Classroom<br>observations<br>• Fidelity of<br>implementation | Field Test II<br>• Remaining Sites<br>• Sister Sites<br>• Systematic<br>comparison groups<br>• Pre/post measures<br>• Classroom<br>observations<br>• Fidelity of<br>implementation                                     | National<br>Launch of<br>DETS<br>Curriculum |
|   | components<br>• Storyboard all<br>marketing material   |   | Concordant Committee II<br>• integrate graphics and art work<br>across K-12 units<br>• edit for consistent look-and-feel<br>• complete marketing materials<br>• disseminate marketing materials<br>for Sept '07 launch |   |





## Appendix D

For Phase III DETS Evaluation Report September 2006

## **Pedagogical Design Material**

The 5Es Worksheet Understanding by Design Powerpoint Page D-1 Page D-2

Handout #1



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jand #2



















## Appendix E

For Phase III DETS Evaluation Report September 2006

## Pilot & Beta Test Data

(by Report Date)

May 19, 2005 September 21, 2005 January 24, 2006 June 20, 2006 October 11, 2006 Summary of Pilot & Beta Test Reports

Page E-1 Page E-37 Page E-65 Page E-71 Page E-103 Page E-105

| DETS Pilot Test Teach  | er Web               | Survey           |                        |                               |
|--|----------------------|------------------|------------------------|-------------------------------|
| Fort Peck Commun   |                      | •                |                        |                               |
| Data period: February 2005-April 2005<br># of surveys: 9                                     | j                    |                  |                        | i 🚯 i                         |
| Grade Level range: K-2   |                      |                  |                        |                               |
| Background Data  |                      |                  |                        |                               |
| A. How many DETS lessons have you taught du  | -                    |                  |                        |                               |
| 1 C 2 C 3<br>89%   | C 4                  | C 5              | C more<br>11%          | than 5                        |
| B. About how many of your students participat  | ted in the D         | ETS pilot lesso  | ns?                    |                               |
| L <sub>1 to 10</sub> L <sub>11 to 20</sub> L<br>11% 89%                                      | 21 to 30             | C 31 to          | 40 🗖 Mor               | e than 40                     |
| C. Briefly list the <i>topics</i> and <i>names</i> of the DI                                 | ETS lessons          | that you taugh   | t. See attached ta     | able                          |
| Survey Questions   |                      |                  |                        |                               |
| 1. Overall, how would you rate the content of t  | these lesson         | s for your stud  | ents?                  |                               |
| too easy   | <b>C</b> just<br>89% | -                | too difficult          |                               |
| 2. Overall, which lesson components (e.g., goal content, assessments, etc.) were particularl |                      |                  |                        | •                             |
| 3. Overall, which lesson components (e.g., goal content, assessments, etc.) were particularl |                      |                  |                        | •                             |
| 4. From your perspective were the lessons tha<br>National Science Standards?                 |                      |                  | 'S curriculum adea     | quately aligned with the      |
| C yes 67%  |                      | no <b>33%</b>    |                        |                               |
| Please briefly elaborate. See attached to  | able                 |                  |                        |                               |
| 5. In general what have been the strengths of  | the DETS I           | essons thus far  | ? <u>See attache</u> d | d table                       |
| 6. In general what areas of the DETS lessons   | that you tau         | ight need impro  | ovement? <u>See at</u> | tached table                  |
| 7. Please take a final moment to provide us wit thus far.                                    | h a couple o         | f overall rating | s on your experie      | nces with the DETS curriculum |
| a. From a teacher's perspective how  | easy-to-use          | is the DETS c    | urriculum?             |                               |
| very difficult to use  | 🗖 difficu            | llt to use       | easy to use            | very easy to use              |
| b. Compared to other science curricu<br>curriculum?  | ılum that yo         | u have taught,   |                        | your students was the DETS    |
| C very unengaging  | 🖸 uneng              | aging            | engaging<br>67%        | very engaging                 |
| 8. Please describe what kind of support or   | · assistance         | e vou would ne   |                        |                               |
| See attached table   |                      | ,                |                        |                               |

Thanks for your help!

|   | Q8 Additional<br>Comments                    | Continued<br>replacement of<br>supplies as the<br>lessons are taught<br>each year.  | Better food models   |
|---|--|---|--|
|   | Q6 Areas to<br>Improve                       | Only to have all the materials readily available for use at the time of the lessons.  | More enrcihment<br>activities  |
| Narrative Responses to DETS Pilot Test Lesson Web Survey<br>Fort Peck Community College | Q5 Strengths                                 | The strengths I<br>noticed were the<br>wide ranging<br>activities the students<br>did to complete the<br>unit. They really<br>enjoyed them and<br>learned a great deal<br>of information. | By 2nd grade<br>students have a<br>pretty good<br>understanding of the<br>food groups so we<br>were able to go<br>beyond that by<br>comparing food<br>labels, looking for<br>high protein, low-fat<br>meats and dairy<br>products etc We<br>really enjoyed taking<br>the trip to the meat<br>and dairy depts. and<br>the buffalo ranch.<br>The jerky making was<br>another favorite.   |
|   | Q4b Align with<br>Nat'l Science<br>Standards |   | We addressed<br>National Standard F:<br>Science in personal<br>and social<br>perspectives,<br>personal health. I felt<br>we did address this<br>standard many times.<br>We discussed how it<br>important for each<br>child to learn about<br>and make healthy<br>food choices. We<br>discussed the effects<br>of both good and bad<br>choices on the body.<br>We discussed the<br>proper care of both<br>meat and dairy and<br>what the possible<br>consequences would<br>be if we made a<br>epersonal choice to<br>eat/drink outdated,<br>discolored or rotten<br>meat/dairy. |
|   | Q3 Ineffective<br>Components                 | The only components<br>that were difficult to<br>use were the 3D food<br>models because they<br>were not ready to<br>utilize at the time I<br>taught the lesson.                          | vocab words were a<br>little dificult and we<br>never really were<br>able to use all of the<br>food models. I found<br>that I had to add some<br>of my own materials<br>due to the fact that<br>my class is very high<br>academically and<br>they needed more<br>challenge.  |
|   | Q2 Effective<br>Components                   | I found all the lesson<br>components effective<br>and easy to use.<br>Two that were<br>particularly effective<br>were the "Milking the<br>Cow" activity and<br>"Making Jerky".            | I felt that the<br>vocabulary list was<br>great except they<br>really struggled with<br>understanding<br>pasteruized and<br>homogonized. These<br>words must have<br>made an impact<br>though because on<br>our field trip to the<br>supermarket, they all<br>point out the products<br>that they found that<br>were labeled with<br>these words. I<br>thought the book<br>selection was nice<br>did a great job of<br>answering some of<br>the questions that we<br>had when we first<br>stared the lesson.<br>The rubric worked<br>great.                                    |
|   | School Lesson Topic                          | I taught the "Exploring<br>Meat and Dairy<br>Products" unit.  | Meat and Dairy   |
|   | ID Scho                                      | <del>4</del><br>∞   | <sup>3</sup>   |

| Q8 Additional<br>Comments                    | We would need the<br>materials needed to<br>make the 3 D models<br>or have the ready<br>made models<br>available. An<br>interavitive computer<br>program would be<br>benificial. We would<br>need the different<br>types of meat that we<br>used within our<br>lesson (buffalo, elk,<br>deer or antelope<br>etc.)We would also<br>need dairy and meat<br>products for the<br>memory game and<br>taste test.   | I will continue needing<br>the support our<br>Poplar DETS co-<br>ordinator has been<br>providing through<br>materials and the<br>insistence that we<br>keep our lessons &<br>units "teacher<br>friendly" but<br>informative to all.  |
|--|---|--|
| Q6 Areas to<br>Improve                       | I felt the lesson was<br>at a great level for<br>Kindergarten or first<br>grade. I feel the<br>lesson needed some<br>enrichment activities<br>to include second<br>grade and the higher<br>level kids. I feel<br>computer programs<br>would be an added<br>feature we could<br>include to reach the<br>higher level children. I<br>felt the lesson should<br>include more of the<br>healthier choice<br>meats and dairy<br>instead of the higher<br>fat content.  | none, thus far, other<br>than needing one<br>more day out of a 5-<br>day unit to "wrap up"<br>learnings.   |
| Q5 Strengths                                 | I felt the lesson was<br>easy to use, fun and<br>motivating for the<br>students. Once we<br>get the hands on<br>materials I feel the<br>lesson will capture<br>the cultural aspects<br>of the native<br>american culture.<br>The lesson is easily<br>broken into smaller<br>lessons or can be<br>taught within a couple<br>days. The field trips<br>is a great added<br>feature for this area<br>of living. I felt the<br>lesson hit many areas<br>of the curriculum<br>such as: art, math,<br>science, health,<br>language arts and<br>social studies. | active participation of<br>students and<br>speakers invited to do<br>presentations   |
| Q4b Align with<br>Nat'l Science<br>Standards | content standard F:<br>science in peresonal<br>and social<br>perspectives.<br>and Personal health   | Students developed<br>an understanding of<br>personal health by<br>viewing videos on the<br>brain & blood<br>systems, by listening<br>to & asking an adult<br>diabetic & our school<br>nurse questions<br>about diabetes, & by<br>learning meanings of<br>body parts &<br>showing them on<br>large life-like body<br>shapes traced by the<br>students. |
| Q3 Ineffective<br>Components                 | I felt the hands on<br>stuff were ineffective<br>because we did not<br>have the stuff readily<br>available. When and if<br>we do get the 3-D<br>models that we<br>depended on in our<br>unit I feel will be a<br>great value to our unit.   | The video on Drugs<br>was too short (only 5<br>min.) and too primary<br>for 3rd grade. I<br>changed the videos<br>to 2 from our school<br>library: "All About<br>Brain" & "All About<br>our Blood Systems"<br>by Life Science.<br>These were much<br>more effective for<br>this age group.   |
| Q2 Effective<br>Components                   | I felt the materials ,<br>vocabulary and<br>assessments were<br>easy to use because<br>it fell right into the<br>science content area<br>of what I already<br>teach. I felt the lesson<br>was fun, motivating<br>and easy to use.   | The book "101 Ready<br>to Use Drug<br>Prevention Activities<br>published by the Red<br>Ribbon Resources<br>Inc. 135 Dupont St.<br>Box 760 Plainview,<br>N.Y. 11803-0760<br>was especially<br>effective & easy to<br>use.   |
| School Lesson Topic                          | The students will<br>explore, explain and<br>be evaluated on their<br>knowledge of meat<br>and dairy products   | I taught a unit of 5<br>lessons in Prevention<br>of Diseases over a 5<br>day consecutive<br>presentation.  |
| ID Schoo                                     | α<br>33   | တ  |
|  |   |  |

| Q8 Additional<br>Comments                    |   | I feel that I am<br>receiving enough<br>support, what I need<br>some help with is<br>getting some input in<br>the cultural aspect of<br>the lessons.   | All materials need to<br>be available at the<br>time the lessons are<br>taught.               | Small group<br>discussion works<br>very well with every<br>part of this unit. This<br>helps the students<br>get a good handle on<br>the information<br>presented in this unit. |
|--|---|--|---|--|
| Q6 Areas to<br>Improve                       | The order that we<br>had it written for<br>things to be taught<br>needs to be changed<br>and we are working<br>on that.   | The lessons need to<br>be very basic, at a<br>Kindergarten level.<br>Easy stuff so that the<br>students can<br>understand what I am<br>trying to teach them.   | The order and<br>arrangement of the<br>lesson needs to be<br>revised.                         | The "healthy foods<br>choices" part needs<br>to be removed to<br>shorten the unit.   |
| Q5 Strengths                                 | The content<br>introduced to the kids.<br>It was kid friendly<br>and of high interest to<br>them. They had fun.   | The strengths are<br>having the lessons<br>actually taught in the<br>classroom. The<br>students are being<br>introduced to the<br>concept of diabetes<br>at a younger age and<br>it may help them be<br>more aware of the<br>importance of being<br>healthy. | The content that has<br>been introduced to<br>the children has been<br>strong.                | This lesson<br>discusses the<br>problem of Diabetes<br>type two and ways<br>to prevent it. This unit<br>covers fourth grade<br>mastery objectives.                             |
| Q4b Align with<br>Nat'l Science<br>Standards | The lesson was aligned with Standard F and not so much with the other two.  | At a kindergarten<br>level, students are<br>not able to<br>understand scientific<br>inquiry. Meaning,<br>some of the lessons<br>were a bit over their<br>heads.  | The lesson was<br>aligned with Standard<br>F, but not so much<br>with the others.             | This unit does<br>address the<br>understanding of<br>personal health.  |
| Q3 Ineffective<br>Components                 | The materials list was<br>a little difficult to use<br>because we didn't<br>have the materials<br>available - The Round<br>Dance Food Model<br>wasn't complete<br>when we did our<br>lesson so we had to<br>compromise. | The science content,<br>materials list,<br>vocabulary, science<br>content  | Material list because<br>all materials were not<br>available at the time<br>of pilot testing. | the objective relating<br>to making healthy<br>food choices made<br>this unit too long to<br>do. This component<br>should be removed.  |
| Q2 Effective<br>Components                   | The assessment was<br>particularly easy to<br>use as it was hands<br>on for the children  | The goal statements,<br>materials list cultural<br>content and<br>assessments  | Assessment, as it<br>was hands-on for<br>children.  | Prevention of Diseases vocabulary combined<br>with the dakota<br>language<br>materials had good<br>information in them   |
| School Lesson Topic                          | Exploring the Food<br>Groups  | Elploring the Food<br>Groups: Fruits,<br>Vegetables, Grains<br>Vegetables  | Exploring the Food<br>Groups: Fruits,<br>Vegetables, Grains                                   | Prevention of Disease  |
| ID Schoo                                     | <b>5</b><br>0   | 6  | ଚ   | <b>ා</b>   |
| <b> □</b>                                    | $\overline{}$   | 17   | 18  | 19   |

| Q8 Additional<br>Comments                    | The authentic Round<br>Dance Food Model of<br>Jewel Payne's.   |
|--|--|
| Q6 Areas to<br>Improve C                     | Tying the cultural part. The authentic Round<br>Dance Food Model of<br>Jewel Payne's.  |
| Q5 Strengths                                 | Emphasizing the responsibility for good health in relationship to the diet you might choose.   |
| Q4b Align with<br>Nat'l Science<br>Standards | The definition of<br>diabetes was age<br>appropriate and the<br>story "Oh, the Things<br>you can DO that are<br>GOOD for you" was<br>a good science book.<br>The food group<br>lesson was a good<br>review for the<br>students as we had<br>already covered the<br>subject earlier in the<br>year.   |
| Q3 Ineffective<br>Components                 | The brainstorming of<br>what they "know"<br>was difficult. It had<br>to be guided by the<br>teacher to get them<br>on the right track of<br>what they knew.<br>Using the term<br>starchy was new to<br>them and I don't know<br>how much they<br>actually understood<br>to separate the fruits<br>and vegetables in this<br>manner. We have<br>actually changed the<br>readings out of<br>American Indian<br>Foods because it<br>didn't flow very well<br>or apply to the part of<br>the lesson. |
| Q2 Effective<br>Components                   | Using the Round<br>Dance Food Model-<br>the students<br>understood the colors<br>on the Indian dolls in<br>relationship to the<br>food group. They did<br>particularly well on<br>the eval with the<br>paper plate activity.<br>This activity was<br>much easier at this<br>time of year and<br>would have been<br>more difficult in<br>September.   |
| School Lesson Topic                          | 9 Exploring the Food<br>Groups   |

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#### DETS Pilot Test Lesson Feedback Form SIPI (Southwestern Indian Polytechnic Institute)



| Data   | period:          | April 2005: S  | September 200         | 1 through Ma  | nch 2005  | . 9.          |
|--------|------------------|----------------|-----------------------|---------------|-----------|---------------|
|        | surveys:         | 49             | september 200         |               |           |               |
|        | e Level range:   | 5th through 8  | 8 <sup>th</sup> arade |               |           |               |
|        | 201011 ago       |                | <i>y</i>              |               |           |               |
| The le | esson component  | ts below were: | very clear            | clear         | unclear   | very unclear  |
| 1.     | Lesson Goal      |                | □ 60%                 | □ 27%         |           | □ 13%         |
| 2.     | Lesson Objecti   | ves            | <b>□</b> 57%          | □ 28%         | □ 2%      | □ 13%         |
| <br>3. | Vocabulary       |                | □ 52%                 | □ 28%         | □ 2%      | □ 17%         |
| 4.     | Material List    |                | □ 57%                 | □ 32%         |           |               |
| 5.     | National Science | ce Standards   | □ 24%                 | □ 69%         | □ 2%      | □ 5%          |
| 6.     | American India   |                |                       |               |           |               |
|        | Content Stando   | ards           | □ 45%                 | <b>4</b> 3%   | □ 7%      | □ 5%          |
| 7.     | State Standard   | ds             | □ 64%                 | □ 30%         | □ 2%      | □ 5%          |
| 8.     | Assessment       |                | □ 50%                 | □ 30%         | □ 7%      | □ 14%         |
| 0      | Ш                |                |                       |               |           |               |
| Overa  |                  |                |                       |               |           |               |
| 9.     | Student partic   | •              |                       | _             | · · · _ · |               |
|        |                  | 🗖 lov          |                       | 🗆 average 3   | 5% □h     | igh 60%       |
| 10.    | Diabetes aware   |                |                       |               |           |               |
|        |                  | □ ins          | sufficient 7%         | 🗆 adequate 🤅  | 92% □e    | xcessive 1%   |
| 11.    | Science conten   |                |                       |               |           |               |
|        |                  | 🗆 ins          | sufficient 10%        | 🗆 adequate    | 78% 🗖 e   | xcessive 12%  |
| 12.    | For teachers le  | esson was:     |                       |               |           |               |
|        | ĺ                | 🗅 teacher frie | ndly 82% 🗖 c          | onfusing 5%   | 🗖 too com | plicated 14%  |
| 13.    | For students le  | esson was:     |                       |               |           |               |
|        |                  | 🗖 too (        | easy 2% 🛛 🗖           | just right 72 | % 🗖 too d | difficult 26% |
| 14.    | Lesson length v  | vas: 🗖 too     | long 21% 🛛 🗖          | just right 67 | % 🗖 too s | short 12%     |
| 15.    | Also, lesson wa  | s: 🗆 othe      | er: See attache       | d table       |           |               |
| 16.    | This lesson nee  | ds more:       |                       |               |           |               |
|        |                  |                | naterials 91%         | 🗆 inservice   | e 🗆 asse  | ssments 9%    |
|        |                  | ••••           | ttached table         |               |           |               |
| 17     | Driefly common   |                |                       |               |           |               |

- 17. Briefly comment on lesson strengths: See attached table
- 18. Briefly comment on areas that need improvement: See attached table

Thanks for the data!

| Additional Comments  | Students were introduced to<br>lessons. As extra I allowed<br>students to illustrate how<br>they visualized "Cell City" in<br>the intro.                               | This lesson was taught in 3 days. I incorporated lessons with material I wanted to teach. (15) It was good because I could break it down into three day's worth. (16b) Maybe some worksheets for students.   |   |  | (16b) illustrated activities.   |
|----------------------|--|--|---|--|---|
| Q18 areas to improve |  | I feel maybe some<br>worksheets for students to<br>follow along at times   | I feel that all the books<br>recommended or at least a<br>copy should be provided.<br>(Cinderella, maybe the diff.<br>stories of that way it could<br>be used throughout.   | Just like I stated in Lesson 2,<br>all stories or books attached<br>would be nice. Especially in<br>the Middle School setting, the<br>library really doesn't carry<br>very low fairytale stories.  | I feel that students should be<br>able to do some illustrations. I<br>understand that some did<br>activities in art, but maybe<br>some activities to include<br>could be pamphlets,<br>diagrams, etc  |
| Q17 Strengths        | This lesson was done just<br>for my own pref. I felt<br>students should get a feel for<br>diabetes and how it affects<br>our body The students<br>enjoyed it very much | I liked the information it is trying to get across   | The students liked the stories. Compare/contrast was also used as an extension.   | It was a good lesson which<br>allowed me to extend it later.   | It was an interesting lesson  |
| Iration Lesson Topic | Unit 1 Overview  | min a Unit 1 Lesson 1  | Unit 1 Lesson 2<br>nis to<br>min  | min a Unit 1 Lesson 3  | Unit 1 Lesson 4<br>nto 3  |
| Actual du            |  | 90 min(30 l<br>day)  | 50 min (I<br>extended tt<br>2 days, 25<br>each day)   | 50 min (25<br>day, over 2<br>days)   | 90min This<br>lesson was<br>broken up into 3<br>days.   |
| Listed<br>duration   |  | 100 min  | 50 min  | 50 min   | 100 min   |
| ol# Grade            | ω  | ω  | ω   | ω  | ω   |
| ID Scho              | 31 6   | 32 6   | 33 6  | 34 6   | 35 6  |
|                      | School# Grade Listed Actual duration Lesson Topic Q17 Strengths Q18 areas to improve duration  | School# Grade       Listed       Actual duration       Lesson Topic       Q18 areas to improve       A         1       6       6       Unit 1 Overview       This lesson was done just for my own pref. I felt students should get a feel for diabetes and how it affects our body The students sourd off i very much       0< | School# Grade       Listed<br>duration       Actual duration Lesson Topic       Q17 Strengths       Q18 areas to improve         1       6       6       Unit 1 Overview       This lesson was done just<br>for my own pref. I felt<br>students should get a feel for<br>diabetes and how it affects<br>our body The students<br>enjoyed it very much       Q18 areas to improve         2       6       6       100 min       90 min(30 min a<br>day)       Unit 1 Lesson 1       I liked the information it is<br>vorksheets for students to<br>follow along at times | School# Grade     Listed<br>duration     Actual duration Lesson Topic     Q17 Strengths     O18 areas to improve       1     6     6     Unit 1 Overview     This lesson was done just<br>tor my own peri. I felt<br>students should get a feel for<br>diabetes and how in affects<br>our body The students     O18 areas to improve     A       2     6     6     100 min     90 min(30 min a<br>day)     Unit 1 Lesson 1     Iliked the information it is<br>worksheets for students to<br>follow along at iffeel<br>and post across     O18 areas to improve       3     6     6     50 min (1<br>each day)     Unit 1 Lesson 2     The students list<br>trying to get across     If eel maybe some<br>to follow along at iffeel<br>across of the across       3     6     50 min (1<br>each day)     Unit 1 Lesson 2     The students listed the<br>trying to get across     If eel that all the books | School# Grade       Listed<br>duration       Actual duration Lesson Topic       Q17 Strengths       Q18 areas to improve         1       6       6       100 min       Unit 1 Overview<br>transport       This lesson was done just<br>transport transport       Q18 areas to improve       Actual duration         2       6       6       100 min       Unit 1 Lesson 1       Liked the information it is<br>outbody The students should get a feel for<br>diables and how much       Liked the information it is<br>outbody The students for students to<br>aday)       Liked the information it is<br>outbody The students to<br>day)       Liked the information it is<br>outbody The students to<br>day)       Liked the information it is<br>outbody The students to<br>day)         3       6       6       50 min (l<br>extended this to<br>esch day)       Unit 1 Lesson 2       The students liked the<br>trying to get across       Lifeel maybe some<br>trying to get across         4       6       6       50 min (l<br>extended this to<br>each day)       Unit 1 Lesson 2       Areas an<br>trying to get across       Lifeel maybe some<br>trying to get across         4       6       6       50 min (d<br>each day)       Unit 1 Lesson 3       Lesson Value Lesson 4       Lifeel maybe some<br>trying to get across         4       6       50 min (d<br>each day)       Unit 1 Lesson 3       Lesson Value 4       Lifeel maybe some<br>trying to each day         4       6       50 min       50 min (d<br>eay) |

Narrative Responses to DETS Pilot Test Lesson Evaluation Form

| <b>A</b> 00  | Actual duration Lesson Topic Q17 Strengths<br>60 min (It was Unit 1 Lesson 5 I like fables personally, so I                                     |                                   | Q18 areas to improve  | Additional Comments<br>(15) Fun, exciting, interesting!   |
|--|---|-----------------------------------|---|---|
| broken up into 2<br>days 30 min<br>each)   |   | >                                 |   |   |
| 60 min (It was<br>broken up into 2<br>days 30 min<br>each)                         | I liked this because it tied in<br>with a literature piece that<br>introduced: The G?? Sisters,<br>Martin Luther King.                          |                                   | It would be nice to attach the<br>Uncle Remus folk tales.   |   |
| 100 min (This<br>lesson was<br>broken up into<br>3days: 35 min,<br>35 min, 30 min) | Unit 2 Lesson 1 This lesson would be great<br>for geography. I used visuals<br>that I downloaded.   | d be great<br>used visuals<br>td. |   | (16b) maybe more visuals  |
| 50 min (Broken<br>down into 2 days<br>of 25 min ea.)                               | n Unit 2 Lesson 2<br>ays  |                                   | Maybe a lesson that is not<br>too long. More visuals.   | (15) This lesson lost the attention of a lot of my students. (16b) Some lower level reading, to the point and fun activities. At times it is hard to get some of the required materials, if it could be provided that would be  |
| 50 min (Broken<br>down into 2 days<br>of 25 min ea.)                               | <ul> <li>Unit 1 Lesson 3 It was interesting to learn</li> <li>ys</li> </ul>   | to learn<br>glyphs                |   | (15) fun we used rocks<br>and sharpie markers.  |
| trip(trip was not<br>possible. I<br>showed films of<br>Petroglyphs                 | Unit 2 Lesson 4 I wish I could've planned a trip, but since this was not possible @ this time, we looked at websites and books with petroglyphs | _                                 | Maybe a lesson to be used in case (back-up plan) you are not able to make a school trip. We only get 1 trip a year. | (15) I was not able to take<br>students on a field trip so I<br>found books (from our<br>library: Selected Petroglyphs<br>in Rio Arriba County) and<br>websites<br>(http://video.search.yahoo.co<br>m/search/video:_adv_prop=v<br>ideo&fr=Fptab-<br>web+&Va=Petroglyphs). |

| Additional Comments          | (16b) Maybe a day could be<br>set aside for someone to<br>come in to help sew for next<br>time.  | (15) Fun!   |  | Students really got into the lesson and we carried lesson on for a couple more days.   |   |  |  |
|------------------------------|--|---|--|--|---|--|--|
| Q18 areas to improve         |  |   | Material was interesting,<br>however, students did not<br>get as involved as         |  | Lesson length could be<br>longer because students<br>share a lot. | Lesson takes 2 periods   | By the time you go over<br>everything and get student<br>feedback, it should really be<br>2 periods.                     |
| Q17 Strengths                | Students were unable to use<br>fabric so they used 8 1/2 X<br>11 size paper with certain<br>requirements such as<br>borders etc. They were<br>displayed and taken home.<br>Neat! | The students had fun with<br>this exercise. They were<br>able to express themselves.                | Interesting materials.<br>Students will re-visit lesson<br>under S.S. Ancient Egypt. | I use this lesson in both L.A.<br>& S.S. because it pertains to<br>both subjects. We also read<br>Cinderella stories from other<br>cultures. | Students related lessons to<br>other subjects/areas using<br>DETS | Students understood lesson<br>and got involved. Students<br>enjoyed the play, "Mr. Insulin<br>and the Cell Keeper" | The lesson was perfect for<br>6th grade students. The<br>students were able to<br>understand and get into the<br>lesson. |
| Lesson Topic                 | Unit 2 Lesson 5  | Unit 2 Lesson 6   | Unit 2 Lesson 1-<br>What are<br>Petroglyphs  | L.A. Lesson 2-<br>Turkey Girl -<br>Cinderella  | L.A. Lesson 1 -<br>Myths & Legends                                | Lesson 2 - What is<br>Diabetes - Family<br>Tree/Play   | Lesson 1 - What is<br>Diabetes   |
| Actual duration Lesson Topic | 50 min (lesson<br>was broken up<br>into 2 day of 25<br>min each)   | 2 days for 2<br>periods (I broke it<br>up into 30 min a<br>day for 2 days<br>for 2 periods<br>each) | 50   | 150  | 150   | 100  | 100  |
| Listed<br>duration           | 50 min   | 2-3 days  | 50   | 100  | 100   | 50   | 50   |
| ID School# Grade             | ω  | Q   | 9  | 9  | Q   | 9  | 9  |
| D Sch                        | 42 6   | 43 6  | 44 12  | 45 12  | 46 12   | 47 12  | 48 12  |

| 9)<br>Q | Schoo | ID School# Grade | Listed<br>duration | Actual duration                          | Lesson Topic  | Q17 Strengths  | Q18 areas to improve  | Additional Comments                                     |
|---------|-------|------------------|--------------------|--|---|--|---|---|
| 49      | Q     | 6/7              | 20                 | 40                                       | lesson 1 -<br>Introduction                              | Students enjoyed the story<br>of Waterjug Boy. We were<br>trying to catch up as we<br>were behind our schedule.                                    | <ol> <li>Break it down into smaller<br/>segments, (2) Too much<br/>interference with school<br/>sport activities. I had to work<br/>around tournament schedule.</li> <li>(3) I was not prepared<br/>because of personal<br/>tragedy.</li> </ol> |   |
| 50      | Q     | 6/7              | 20                 | 45                                       |   | Overheads are great. These<br>lead into a discussion. We<br>were able to use the pretest<br>to coordinate with<br>overheads. Pretest was<br>clear. | Fill in the blank &/or matching post test for review.   | (15) Student participation was good.                    |
| 51      | Q     | 6/7              | 50                 | 45                                       | Reading the book,<br>"Through the Eyes<br>of the Eagle" | The book is so well<br>illustrated. The story is<br>appealing. Perhaps it would<br>be a good one to start in the<br>first lesson.                  | <ol> <li>Use the book at the<br/>beginning as a lead in. (2)<br/>Planning better. (3) Activities<br/>to go with the book</li> </ol>   | (15) Created by me. The<br>book is so well illustrated. |
| 52      | 9     | ω                | 10                 | OK - longer with<br>walk                 | Walking 9-<br>Hydration                                 |  | We didn't have any more of<br>the water bottles so I had<br>students buy or bring one in<br>& we did OK.  |   |
| 53      | Q     | ω                | Q                  | 30                                       | Walking 8 -<br>Stretches                                |  | We had just finished an article on NOT to stretch so we modified this. We walked first, then stretched lightly then walked again.   |   |
| 54      | 9     | ω                | 50                 | about that                               | walking 7 - What's<br>so great                          |  | Need more directions for<br>Handouts.   |   |
| 55      | 9     | ω                | 20                 | All hour - we<br>went for a long<br>walk | Walking 6 - daily                                       |  |   | Go when it's cold they<br>walk faster.                  |
| Additional Comments          | I divided the class up into<br>groups of 4 or 5 kids and let<br>them choose where they<br>wanted to walk to. They<br>have had their pedometers<br>for about a week, so we<br>took those steps and figured<br>about how far they walked<br>and then they picked a town<br>to walk to. |   |   |   |   | (16b) the story was a little<br>hard.  | (15) Didn't have enough time<br>to complete. (16b) Fine the<br>way it is            |
|------------------------------|--|---|---|---|---|--|---|
| Q18 areas to improve 🛛 A     |  | It would be nice to have a chart in here that would tell the kids where their heart rate should be. | Can not send these home.<br>Too many are lost if made<br>HW | Did good. You just have to<br>work with the kids to find out<br>how to explain how to put<br>them on. | Some of the kids have a hard<br>time understanding what is<br>considered fit and sit. You<br>have to walk them through<br>the 1st day, activity by activity | We took 4 days to the story to the Cartoon Kids. Did have h some trouble understanding story to relate to cartoon. | Could not complete it with all ts<br>students.                                      |
| Q17 Strengths                |  |   |   |   |   |  | Students learned how to take<br>their pulse. Learned to use<br>different pedometer. |
| Lesson Topic                 | Walking 5 - goal set   | Walking 4 - Fitness   | Walking 3 - Logging   | Walking 2 -<br>Pedometers   | Walking 1 - How<br>Active   | What is Diabetes<br>Part 1   | Walking Lesson #4   |
| Actual duration Lesson Topic | This took us 2<br>days because I<br>changed the<br>lesson some.  | a little longer   | close to that   | 40  | 30-40   | 20   | 30  |
| Listed<br>duration           | 20   | 30  | 20  | 40  | 20-30   | 50   | 30  |
| ID School# Grade             | σ  | Q<br>Q  | <b>8</b>  | Ø   | Ω<br>Q  | Ø  | 12 <b>5</b>   |
| ID Sc                        | 26   | 57  | 58  | 59  | 60  | 61   | 62  |

| Additional Comments          |  | (15) Fit & Sit check<br>(Basketball activity) (16b)<br>adequate/ Incentives<br>suggested.   | (15) simple but important. A good lead in to pedometers and to introduce record-keeping. (16b) prepared fitness folders.                                       |   |   |
|------------------------------|--|---|--|---|---|
| Q18 areas to improve         |  | Students could use a visual aide such as video to begin preparation for activity, but it worked out okay.   |  |   |   |
| Q17 Strengths                | Students grasped the<br>pedometer concept and<br>usage. They wanted to<br>reach the 10,000 steps the<br>first day. Steps log is very<br>useful because it keeps them<br>on track. Students were<br>instructed to wear<br>pedometers on their side, to<br>the pocket. | Student activity log was<br>easy to fill out. Students<br>were willing to participate.<br>Students understood what<br>was expected of them and<br>what they needed to do. | Students placed sheets in a<br>file that was to become their<br>fitness file. Lesson was of<br>high interest to students<br>because of the personal<br>nature. | Hands-on materials<br>(pedometers) of interest to<br>students. Good but difficult<br>means of stressing personal<br>responsibility for materials<br>(pedometers). | Good data collection activity.<br>A good lead-in to scientific<br>data collection in conjunction<br>with science experiments. |
| Actual duration Lesson Topic | Pedometers   | Walking #1 - Fit/Sit<br>check   | Walking Lesson #1<br>- Fit/Sit   | Lesson #2 -<br>Pedometers   | Core Diabetes<br>Lesson #1 - How<br>Active Am I   |
|                              | 24   | 30  | 20   | 18  | 15  |
| Listed<br>duration           | 30   | 30  | 20-30  | 40  | 20-30   |
| ID School# Grade             | 12 5   | 12 5  | 12 5   | 12 5  | 12 5  |
| ₽                            | 63   | 64  | 65   | 66  | 67  |

| Additional Comments          |   | Why our Native people are at<br>high risk for developing<br>diabetes. They need to<br>develop healthy food and<br>prevent getting diabetes.<br>Pottery were used during the<br>early times when our people<br>made healthy meals. |   |   | Goal, Objectives and<br>Assessment were seen as<br>too complex.                         |
|------------------------------|---|---|---|---|---|
| Q18 areas to improve         | Perhaps a good video would<br>help as far as my limited time<br>frame. For a younger group<br>such as mine (5th grade) it<br>would have been great to<br>have visuals (pictures) to go<br>along with the story used to<br>introduce the lesson. | Vocabulary words were too<br>complicated for students to<br>understand. Need more<br>simple writings, words.  |   |   | Lesson needs to be adapted<br>to ESL. Too complex for ESL<br>students, please simplify. |
| Q17 Strengths                | Overheads were excellent.<br>Pre and Post tests excellent.  |   | Pottery making - Coil<br>Techniques. Students are<br>very impressed using coil<br>method and how they can<br>get formed into different<br>shapes of pottery | History of pottery Why we<br>need to continue teaching<br>our young children the<br>importance of pottery. How<br>we can prevent diabetes by<br>making pottery. Diabetes<br>discussion is usually carried<br>on while making pottery. | The walking is great  |
| Actual duration Lesson Topic | 30 What is Diabetes?  | lesson 3  | lesson 4  | Lesson 1&2  | Walking/Pedometer<br>s  |
| Listed<br>duration           | 50  |   |   |   | 45  |
| ID School# Grade             | 2<br>15   | 12 6-7  | 12 6-7  | 12 6-7  | 12 8  |
| 0                            | 68  | 69  | 70  | 71  | 72  |

| Additional Comments          | (15) Worked with tribal<br>diabetes program. Student<br>participation was high *with<br>adaptations. Goal,<br>Objectives, Vocabulary and<br>Assessment were seen as<br>too complex. | Student participation was<br>high *with adaptations. Goal,<br>Objectives, Vocabulary and<br>Assessment were seen as<br>too complex. |   |                               |                                   |                                   | Activities took about a week<br>to complete. Hands on<br>activities : poster and<br>worksheet. |
|------------------------------|---|---|---|-------------------------------|-----------------------------------|-----------------------------------|--|
| Q18 areas to improve         |   |   | Vocabulary was difficult;<br>needed to be spoken in<br>native language. A lot of oral<br>instruction & rephrasing was<br>necessary. |                               |                                   |                                   |  |
| Q17 Strengths                | Totally adapted core material as said in oral interview.  | Adapted with Diabetes program from S.D.   | Diabetes Ed. Is very<br>important to students & family  | Adapted with Tribal Program   | Adapted with Hands on<br>projects | Adapted with Hands on<br>projects |  |
| Lesson Topic                 | Core part 2   | Core part 2   | Core Unit 1   | Core Unit 1                   | Diets, Exercise                   | Diets, Exercise                   | Diets, Exercise 6&5  |
| Actual duration Lesson Topic | 45  | 45  | 3 classes 45 min<br>each  |                               | 2 classes 45 min<br>ea.           | 2 classes 45 min<br>ea.           | 3 classes 45 min<br>ea.  |
| Listed<br>duration           |   |   |   | 2 classes<br>of 45 min<br>ea. |                                   |                                   |  |
| ID School# Grade             | ω   | ۲   | ω   | 2                             | Ø                                 | 7                                 | Q  |
| Scho                         | 12  | 12  | 12  | 12                            | 12                                | 12                                | 12   |
| ₽                            | 73  | 74  | 75  | 76                            | ΤT                                | 78                                | 79   |

#### Interview with Denise Gallegos – April 22, 2005; Dulce Middle School

#### Length of Lessons

The teacher indicated that the length of the lessons could have been completed in one class session, but she completed most of the lessons over a two-day period. She thought that in this way she could capitalize on the interest that students showed for a particular lesson and could expand on some to the concepts/ideas contained within that lesson.

The ability of the teacher to adapt the lessons, not only as it pertains to the length, but also to the interest level of the students has become very evident. The teacher indicated that based on student interest exhibited by the students, she either lengthened or shortened the lessons.

#### Integration of Lessons

The teacher stated that the lessons could have easily been integrated into other subject areas such as Social Studies. She did not teach Social Studies this year, but thought that some of Language Arts activities would have fit very well into her Social Studies curriculum. She used many art activities to have students better visualize some of the Diabetes concepts. The students took many of their art projects home. The stories (fables) that students wrote were also sent home. She will try and have students bring them back to the school.

#### Integration with diabetes concepts

The teacher was able to review the diabetes concepts with the students by relating to the every day experiences of the students. For example she talked about the exercise patterns of the past when her parents and grandparents had to work hard in the fields; when there were not many modern conveniences such as washing-machines. She also used the foods served in the cafeteria as an example of not such healthy offerings, and challenged them to eat foods such as salads.

#### Adequacy of the Units

Ms Gallegos completed all of the 12 lessons and stated that they were "fun" and for the most part held to interest of the students. Overall the teacher was pleased with the lessons. She felt that the lessons could be completed within the suggested time-frame, but she chose to extend the lessons to two and even three days.

Some of the activities, such as the suggested field trip to a petroglyph site were not possible because of travel budget constraints. Other activities involving use of fabric to construct an article of clothing was also not completed because students did not bring the required materials.

I informed Ms. Gallegos that there were plans to modify the Units. She enjoyed doing the lessons and was interested in future participation in the project.

#### Interview with Josette Lopez – March 23, 2005; Santo Domingo M.S.

#### Length of the Lessons

The length of the lessons is too long for the time frame suggested. Although the time frame suggested for the lessons are generally 50 minutes, the teacher adapts the lessons to be completed over a two to three day period.

#### Integration of Lessons

The teacher indicated that she especially liked the lessons because she was able to integrate them with other subject areas. The teacher teaches Social Studies in addition to Language Arts. For example one of the lessons she taught from the Petroglyphs lesson, she was able to integrate with the Ancient Civilization Egyptian that was required in the  $6^{th}$  grade curriculum. She also indicated that some of the concepts contained within the lessons could also be integrated with math.

#### Adequacy of Curriculum

The teacher indicated that the lessons were very amenable to integration with the State required subjects. She felt that the lessons were very "kid friendly". The students could relate to the topics in the Diabetes lessons because there were many students whose families were affected by diabetes. There was real life application of the diabetes concepts. For example there was a student in the class who had diabetes, and when snacks were being planned for special occasions, students would bring snacks that were not laden with sugar.

The teacher stated that the students like the Mr. Cell lesson. They especially like to role play the different characters depicted in this lesson.

Overall the teacher was very complimentary with the Units. Although she did feel that the Units were not able to be completed within the suggested time frame, she was able to modify the lessons to fit her class periods. Ms. Lopez indicated that the Units were very useful to her since she was responsible for completing the Ancient Civilization curriculum required by the State. The units we developed were able to enhance her curriculum.

I informed Ms. Lopez that there were some plans to modify the Units and possibly the units would not be in the same format. She understood that possible changes could occur, and she asked whether she would still be able to use the units as presented.

#### Interview with Manuelita Lovato – February I, 2005 at Santo Domingo Middle School

Interviewer: -- Santo Domingo Middle School and Manuelita taught lessons from the art unit and she will tell us which lesson she is critiquing. She has a total of four lessons.

And let me scoot over here and, Manuelita, I'll let you go ahead with the name of your first lesson and tell us all about it.

Ms. Lovato: My first lesson is the History of Pottery, why we need to continue teaching our young kids the importance of pottery. And along with this, how we can prevent diabetes by making pottery.

The diabetes discussion is usually carried on while making pottery. It is so important that our students know the type of food that they should be consuming.

And one important thing, too, is that it is important that they need to exercise. And this is part of the lesson one, too, that I teach in pottery class.

One important thing, too, is that I greatly put emphasis on the history of pottery, as how the materials were -- were gathered. Gathering material exercises were done. You had to walk a distance to get the clay, as well as the red slip. So this is part of that.

And then also, during the springtime, how you have to walk to the fields to gather the plant, the -- spinach, and then how that process is done. This is also part of the learning process.

And then to the final steps on the history of the pottery is the firing process, how the firing method is done. Traditionally, they have to gather a cedar wood to be used for firing pottery.

So this is all very important for students to know so they can be able to experiment on their own during the summer, while they are at home. So the students are very interested, wanting to learn and they have always had questions to ask. So that makes me happy when they have questions and wanting to know, you know, some of the very important things that they should know.

Interviewer: Now can you tell me, Manuelita, the lesson the way it was written, how could it be improved?

For example, we are really interested in knowing if maybe they are too long, or too short, or if there are things that were left out, that once you taught it you realized we should have included some other examples or activities.

So, from a teacher perspective, sort of evaluate how the lesson is written. Because we are going to be revising the curriculum and it will all be based on what we hear from teachers. So we just want you to be honest and tell us things that can be improved.

Ms. Lovato: Okay. To develop a curriculum, I would say it's very important that we have student input, as well as parental input. And then also the teacher's point of view has to be shared with the parents and students. Because some of the curriculum that I have read, I think it is too extensive. It should be very -- for different grade levels so these students can be able to understand.

Some of the wordings that are written in the curriculum are very hard for a lot of the students to understand. I mostly have to have the students look it up in the dictionary, which is also good, I would say. But to really get things directly across to

students, I think they should be very simply written.

Interviewer: Perfect. That's the kind of information that will help us.

Okay. Anything else on the pottery lesson? If not, we'll move on to the second

lesson. And you can tell us the name of the second lesson that we are evaluating.

Okay. Lesson one and two on the core diabetes concepts were combined and we'll do that next. So this is the evaluation for lessons one and two on diabetes.

Ms. Lovato: One of the things that I have found out written -- things that are written about diabetes, I think also like this is fairly new to a lot of the students, the definition of diabetes. What is really diabetes and how is diabetes affecting people? So these type of things are very important.

And then also I would say some of the wordings in diabetes that you try to describe it, like identifying the organs, a lot of our students are not familiar with those type of things. So I think we need to develop a different method how we can get this information across to students as well.

Interviewer: That's great. Thank you. Okay. Are we ready for the next lesson? Ms. Lovato: Uh-huh.

Interviewer: And that will be which one? Lesson --

Ms. Lovato: Lesson three. My information here is why are native people are at high risk for developing diabetes. They need to develop healthy food and prevent getting diabetes.

Pottery were used during the early times when our people made healthy meals. I think from the earliest point of -- from the early start, excuse me, a lot of our native people used natural foods. And there were no preservatives added to these kind of native foods. And I try to bring that across to students.

Nowadays we have a lot of different kinds of foods that are affecting our young kids, especially snacks like Hot Cheetohs, their favorite food, and Coke. These type of things were brought to our school and I just can't believe seeing kids carrying some of these things in their backpacks.

And then also at the time when this was going on, we also had a Coke machine right at the entrance of our school. And that really made me upset because after I found out what was happening within our own community with the epidemics of diabetes, I immediately approached the principal and explained to him that we should really remove the Coke machine. Along with a few parents' support, we succeeded. So the pop machine is no longer serving our kids.

And then after that our approach was to search through backpacks, that no child comes in with two cans of Cokes, nor large bag of Cheetohs. This has completely stopped. And now we are still trying to get the kids to understand that they cannot or should not be consuming a lot of this because this can create diabetes.

So this portion of eating habits has really been explained to students. And I'm very happy that a lot of the students have really learned some things that we have shared from the books that we have used from the diabetes program.

Interviewer: Was there enough content in there about eating habits and snack foods, or was that something you felt you needed to kind of add?

Ms. Lovato: That was the most important thing that needs to be added to the lesson plans. Because most of the time I'm a reader of the newspaper and a lot of the healthy information that I get for kids, like most recently in the USA News, I found information in there that says our kids are too fat. We need to feed our kids more healthy food. And it identified the type of foods that they should be consuming. So more of this information is needed within the lesson plans.

Interviewer: Okay. Good deal. Thank you, very much. That's helpful.

Now we have one more lesson, do we?

Ms. Lovato: Yes.

Interviewer: What is the title of the fourth one?

Ms. Lovato: Okay. The fourth lesson that I used from the lesson plans is pottery making, the Coya (sp. ph.) techniques.

Students are very impressed using Coya method and how they can get -form into eight different shapes of pottery. This was stressed to the students because, like I said, I mostly start from the early history into the present new types of methods. So Coya method was very impressive to the students and they really enjoyed creating pottery.

I feel that they have learned quite a bit from doing the pottery because the students are so happy. They had a very and a tremendous experience with their presentation on -- with the diabetes program and the pottery making. That was done recently at our school. Students are still talking about how they thought from the start that they were afraid. To the end they said, "We did it" and "How did we do that presentation."

And I told the students they did so well and I'm very proud of the students for getting in front of the people because I think public speaking is so difficult. But my students did very well and I'm very proud.

And I'm very proud to be part of the diabetes program because I, myself, have learned quite a bit. I normally get different information by pamphlets that I pick up from -- from the hospitals. But now, working with people from the diabetes program, I think this has really helped me a lot. And I have understood a lot of things that has been brought to our attention and I'm happy because I can be able to share with students and I can be able to teach the students the importance of eating healthy food.

Interviewer: Now that student presentation, that was sort of a special activity that was unique at Santa Domingo. And I believe that that was created from you and Tony and maybe we should include that as an optional activity. Would this be the lesson that it would go with?

- Ms. Lovato: Yes. I think it will be like self-evaluation for students. What they have learned from the program, from the lessons that we have taught them, and then to the end that they -- you know, they're proud. And they did proudly by doing a presentation to a group of people.
- Interviewer: So we might need to come back to you for help on building in that student activity because these students really did a wonderful job and we want to use that as an example in the curriculum. We don't have that in there now.
- Ms. Lovato: Good. I will be very proud to be part of this planning process for the students. I think it would do very well.

Interviewer: I think we're finished. Thank you, Manuelita.

Ms. Lovato: Okay. Thank you. And I thank everybody for giving us this opportunity at our school to be part of the diabetes program.

Interviewer: End of interview. (End of interview.)

#### Interviews with Peggie S. Nez – Diabetes/vessel Lessons at Dulce M.S.

Monday: January 24 – Dolly and visitors joined the 6<sup>th</sup> and 7<sup>th</sup> hour art classes. Dolly introduced herself and began the lessons by presenting the stories of "The little Waterjug Boy" and "The Cell Keeper". The class ended with an introduction to the 19 Pueblos and 3 other Native American Nations of New Mexico. The 6<sup>th</sup> hour class needs more instruction in listening skills. The 7<sup>th</sup> hour class was well behavior and joined in the class discussion. They seemed to enjoy the stories and actively participated in the listing of the 19 Pueblos and other tribes of New Mexico.

Monday: January 31 – Dolly and I used the overheads to explain "What is Diabetes" and the different types of diabetes. Dolly explained the concepts on the board as I followed along with the overheads. We reviewed the vocabulary, the 19 Pueblos and the other tribes of New Mexico and the styles of pottery. Students drew the 4 different types of Native pottery and added their unique designs. These designs will be used to create a mug during the next Monday class. Pretest given.

Thursday: February 3 - I read the story "Through the eyes of the Eagle" to both classes and had students draw their version of the story. Again, the 6<sup>th</sup> hour class needs more instruction in listening activities. Those who listened closely did very well on their illustrations.

| DETS Pilot Test Teac   | her Web Su                    | irvey                    |   |                            |
|--|-------------------------------|--------------------------|---|----------------------------|
| Haskell Indian Nati  | ions Univers                  | ity                      |   |                            |
| Data period: February 2005-April 200<br># of surveys: 16                                     | )5                            |                          |   |                            |
| Grade Level range: K - 4   |                               |                          |   | •                          |
| Background Data  |                               |                          |   |                            |
| A. How many DETS lessons have you taught   | during the Pilot T            | est Phase?               |   |                            |
|  | C 4                           | C 5                      | 🖸 more tha                              | n 5                        |
| 6% 6%  | 19%                           | 31%                      | 38%                                     |                            |
| B. About how many of your students particip  |                               |                          |   |                            |
| C <sub>1 to 10</sub> C <sub>11 to 20</sub><br>50%  | 21 to 30<br>50%               | C 31 to 40               | C More th                               | nan 40                     |
| C. Briefly list the <i>topics</i> and <i>names</i> of the I                                  | DETS lessons that             | at you taught. <u>Se</u> | e attached table                        |                            |
| Survey Questions   |                               |                          |   |                            |
| 1. Overall, how would you rate the content of  |                               | •                        |   |                            |
| too easy   | <b>i</b> just rig<br>100%     | ght 🖸 .                  | too difficult                           |                            |
| 2. Overall, which lesson components (e.g., goo<br>content, assessments, etc.) were particula |                               |                          |   | •                          |
| 3. Overall, which lesson components (e.g., goo<br>content, assessments, etc.) were particula |                               |                          |   | •                          |
| 4. From your perspective were the lessons th<br>National Science Standards?                  | hat you taught fr             | rom the DETS cur         | riculum adequat                         | tely aligned with the      |
| C yes 100%   |                               | no                       |   |                            |
| Please briefly elaborate. See attached   | <u>table</u>                  |                          |   |                            |
| 5. In general what have been the strengths o   | of the DETS less              | ons thus far? <u>Se</u>  | e attached to                           | able                       |
| 6. In general what areas of the DETS lesson  | s that you taugh <sup>.</sup> | t need improveme         | nt? <u>See attac</u>                    | <u>ched table</u>          |
| 7. Please take a final moment to provide us w<br>thus far.                                   | vith a couple of o            | verall ratings on y      | vour experience                         | s with the DETS curriculum |
| a. From a teacher's perspective ho   | w easy-to-use is              | the DETS curricu         | ulum?                                   |                            |
| very difficult to use  | C difficult 1                 |                          | asy to use<br><b>00%</b>                | C very easy to use         |
| b. Compared to other science curri<br>curriculum?  | culum that you h              |                          |   | r students was the DETS    |
| <b>F</b> <sup>-1</sup>   |                               |                          |   |                            |
| very unengaging  | unengagin<br>6%               | ng - e<br>819            | engaging<br>K                           | very engaging<br>13%       |
| 8. Please describe what kind of support of   |                               |                          |   |                            |
| See attached table   |                               |                          | · · · · / · · · · · · · · · · · · · · · |                            |

Thanks for your help!

| suggested websites.<br>I gave them a point<br>for each fact found<br>and written down.<br>I helped students<br>select topics for<br>research using the<br>suggested topic list. It<br>was difficult for them<br>to generate topics. | Changed the areas I<br>felt needed<br>improvement.  |
|---|---|
| learning about dairy.<br>They especially<br>enjoyed the internet<br>search.   | Students enjoy the<br>Internet search. The<br>poster in pairs   |
| research.   | Followed the standards  |
| component,yet.  | Made following<br>changes<br>Made an internet   |
| assessments   | QK  |
| Dairy Lessons<br>Engagement<br>Exploration<br>Extension/Elaboration   | 4 7 Meat lessons<br>5E lessons<br>including internet  |
|   | assessments cultural research. learning about dairy. suggested websites.<br>component,yet. They especially ligave them a point<br>enjoyed the internet and written down.<br>I helped students<br>search. I helped students<br>select topics for<br>research using the<br>suggested topic list. It<br>was difficult for them |

Narrative Responses to DETS Pilot Test Lesson Web Survey

Haskell Indian Nations University

| Meat lessons<br>5E lessons<br>including internet<br>search, word web,<br>cooperative groups<br>making a poster |
|--|
| 2.2002   |

| Made following<br>changes<br>Made an internet<br>sheet with four web | addresses for<br>students to use.<br>Included lines for<br>them to write facts<br>about meat. | Changed the coop<br>groups to student<br>pairs to work on the<br>meat posters. | divide groups<br>according to different<br>meats and then<br>suggest the topics<br>listed such as<br>source, processing,<br>care, etc. |
|--|---|--|--|
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Report Date: 5/19/2005

Students enjoy the Internet search. The poster in pairs worked much better. Students enjoyed the expert groups and question and answer game.

| Q8 Additional<br>Comments<br>Supplies will need to<br>be purchased by<br>someone.<br>I have had to<br>purchase a few<br>things by myself.  |   | Except for the milkweed information I had what I needed to teach these lessons.   | The time issue is my<br>main concern.<br>Luckily the lessons<br>work really well with<br>our own Science<br>curriculum.  |
|--|---|---|--|
| Q6 Areas to<br>Improve<br>Again, just some<br>clarification needed.  | As mentioned earlier<br>the very beginning<br>lesson needed to be<br>revisited to include<br>more of an intro.          | The time frame for<br>some lessons needs<br>to be adjusted. More<br>pictures/information<br>may be needed to<br>make the cultural<br>component more<br>effective. |  |
| Q5 Strengths<br>The students seem to<br>enjoy the content.   | Teacher friendly  | Hands on activities<br>that were effective<br>and enjoyable.  | They are very easy<br>to follow and teacher<br>friendly. I had a<br>substitiute on one day<br>and she said the<br>lesson went very<br>well.  |
| Q4b Align with<br>Nat'l Science<br>Standards   | I think the lessons<br>align well with the<br>standards.  |   |  |
| Q3 Ineffective<br>Components<br>Just needed some<br>tweeking of<br>directions.   | The beginning of the<br>unit needed to be<br>revised. It was a little<br>vague. A brief intro.<br>needed to be included | If was hard to use<br>the cultural<br>components about<br>milkweed as no<br>pictures/samples<br>were available.   | As stated above, I<br>only found one areas<br>that needed changes.   |
| Q2 Effective<br>Components<br>It all seemed pretty<br>easy to follow.<br>We didn't need a lot<br>of supplies.<br>By the pre and post<br>tests, it seems<br>effective.            | goal statemnts<br>material lists<br>science contents  | The overall objectives<br>of these lessons<br>were met effectively.<br>The materials that<br>were run off<br>(appendixes) were<br>useful.                         | Overall, I felt very<br>comfortably teaching<br>each lesson. I felt the<br>first lesson needed<br>additional background<br>information (2 read<br>alouds) in<br>engagement. This has<br>be revised already<br>and worked much<br>better!!  |
| School Lesson Topic<br>7 Food Needs of<br>Humans and Other<br>Animals<br>Serving Size, Label<br>Reading, Recognizing<br>Foods that Contain<br>Carbohydrates, Fats<br>and Protein | plants-<br>parts/functions<br>environmental factors<br>cultivation  | Plant parts and their<br>functions - lessons 1<br>to 4  | Life Science Unit:<br>1. Plant Parts and<br>Functions<br>2. How Plants Are<br>Alike and Different<br>3. Cultivating Plants<br>4. Human Impact on<br>Environment (how<br>human impact has<br>changed our<br>environment)<br>5. Human Impact the<br>environment (ways to<br>help protect the<br>environment) |
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| Q8 Additional<br>Comments<br>Nothing at this time.   | Since we changed<br>the web search<br>options and provided<br>wevsites, it has been<br>easier to do the<br>research option. Most<br>schools have<br>internet possibilities.<br>Hopefully they have a<br>computer lab, so that<br>all students are able<br>to research at the<br>same time. | School libraries seem<br>somewhat limited in<br>providing enough<br>materials for all<br>students to have<br>something to<br>research. Use of the<br>encyclopedia helps. | Just the supplies and<br>books listed in the<br>lessons.   |
|--|--|--|--|
| Q6 Areas to<br>Improve<br>Not that it's a<br>concern. It will just<br>need to be changed.<br>All of the lessons so<br>far will need an<br>adjustment on length<br>of time to complete<br>from 30-45 min. to 45-<br>60 min. | Changed the poster<br>assignment to one<br>per person. I have<br>found that small<br>groups don't work<br>well in designing a<br>poster.   |  | none at this point   |
| Q5 Strengths<br>Student interest   | Students are<br>interested in topics<br>Activities are<br>interesting  |  | High interest for first<br>graders. My students<br>have enjoyed the<br>lessons.  |
| Q4b Align with<br>Nat'l Science<br>Standards   | Aligned with<br>standards that<br>applied.   |  | The lessons were<br>written with the<br>standards in mind.<br>They do cover the<br>required standards<br>for first grade as far<br>as plant science is<br>concerned. |
| Q3 Ineffective<br>Components<br>NA   | Plan seemed to work<br>well.   |  | none at this point   |
| Q2 Effective<br>Components<br>So far everything has<br>worked great!! The<br>kids have been very<br>engaged.   | All components were<br>easy to use   |  | science content:<br>*it covers science<br>curriculum required<br>for first grade<br>*the lessons are<br>working well for this<br>level                               |
| School Lesson Topic<br>7 Friendship- Venn<br>Diagram, Scavenger<br>Hunts, Accordion<br>Books, Mobiles All of<br>these lessns have<br>compared likes and<br>differences of our<br>friends.                                  | Healthy Living<br>Bullying<br>Being a friend   |  | Life Science-Plants<br>and their functions<br>life cycle of a plant  |
| ID Schoo<br>10 7   | ►  |  | 12   |
| = ~  | <del>~</del>   |  | ~  |

| Q8 Additional<br>Comments<br>Time.  | I always appreciate<br>having the anwser<br>key available as a<br>double check as well<br>as ease for me. We<br>need to include them.   | Help with the cultural component.   |
|---|---|---|
| Q6 Areas to<br>Improve<br>I don't know of any<br>this time.   | They seemed fine -<br>the cultural<br>components seemed<br>like native american<br>students might<br>already be aware of<br>some of these. They<br>worked fine in our<br>building because we<br>have a good mulit-<br>cultural blend. | Length of lessons<br>often took longer than<br>suggested.<br>Otherwise, things<br>went fairly smoothly.   |
| Q5 Strengths<br>The students enjoy<br>the hands-on<br>activities.   | Helping make the children aware of healthy food choices, serving sizes, and the effects of good choices   | Nice variety of<br>activities that<br>students enjoy while<br>mastering the<br>intended objectives.   |
| Q4b Align with<br>Nat'l Science<br>Standards<br>They seem to meet<br>the criteria stated in<br>the standards.   | They met the standards listed   |   |
| Q3 Ineffective<br>Components<br>The pedometers<br>were a little time<br>consuming due to<br>figuring each<br>student's stride length<br>and programming the<br>pedometers.  | some of the optional<br>lessons were a little<br>time consuming   | I suggested some<br>minor revisions, but<br>not major problems<br>were found.   |
| Q2 Effective<br>Components<br>I found them all easy<br>to use. Of course,<br>when you develop<br>them yourselves it<br>makes sense to you!  | Goal statements,<br>materials list was<br>very complete   | Good resources,<br>students enjoyed<br>activities, test results<br>indicate good<br>understanding of<br>science content.<br>(Cultural component<br>not tested.) |
| <ul> <li>ID School Lesson Topic</li> <li>13 7 Healthy Choice<br/>collage<br/>Presentation of<br/>collage with<br/>discussion<br/>Learn to use, and<br/>explore use of<br/>pedometers<br/>Physical activity<br/>involved in Native<br/>American dancing</li> </ul> | Making Healthy<br>Choices, Setting<br>goals for good health,<br>Meat and Dairy<br>products  | Six Food Groups (Life<br>Science Curriculum<br>Lessons 9-12)  |
| ID Schoo<br>13 7  | 20  | 21 7  |
| <b>— ~</b>  |   |   |

School Lesson Topic ≙

25

Humans and Other Making Healthy Food Needs of Choices Animals

## Components **Q2** Effective

their number of steps and portion size. We aken - so this lesson did have an effect on size should look like. the pedometers went aware "hands on" of them. The students problem with any of Another lesson with very well. However hey could increase did the portion size which they enjoyed enjoyed the lesson smart food choices students wanted to regarding nutrition, what a true portion he lesson to see if activity with cereal pedometers didn't did not have any several days after presented by our and were made correctly so this rustration. The keep using the pedometer for seem to work caused some confusion and school nurse many of the

unclear to me what is

required for an

answer.

# **Q3** Ineffective Components

Q4b Align with

Nat'l Science

nealthy food choices, it the topic presented on the state science standards, however, emphasized on the state science test. You can probably align any science topic to meet the test? Magnets, electricity and Standards erosion is #1 to list three healthy eacher. Also, should east 10 questions??? Choices - may need ests need to have a wording for question three components is key supplied for the Both pre and post each test have at ife choices - the Making Healthy On the test for to change the

# **Q5** Strengths

Healthy food choices, exercise, portion importance of sizes

BEST and leave a activities" are the Any "hands on nore lasting mpression.

### Q6 Areas to mprove

Ha! cold to come up with a consuming. Our time nealth problem. What spend our time wisely on the topics that are Now we are not even lessons are very time ceing forced (through really teaching about DETS lessons topics are in addition to our is so limited and we Diabetes Unit. This our school district is pressure is really on curriculum. We are years ago, we were HAVE to make AYP on our state tests or and made the most ests. Many of the do not come under we developed the Many of the topics our curriculum that When I began this made sense to us was our best work he teachers state only on the state we need to teach. irst year, we feel since it is such a diabetes and the state testing) to sense, and was endeavor a few eacher friendly. in trouble. The wide. Actually,

## **Q8** Additional Comments

limit what we teach to the TOPICS that are More time in the day. We would need to on our state tests.

nationwide.

them.

| Q8 Additional<br>Comments<br>Making sure all<br>supplies and books<br>are on hand.  | Time and materials  | I have not seen any<br>lessons except those<br>I helped write so I<br>can't comment on this<br>question. After I<br>see the entire<br>curriculum I will feel<br>better prepared to<br>answer this question.   |
|---|---|---|
| Q6 Areas to<br>Improve<br>Some of the lessons<br>are too long, they<br>require more than one<br>day to cover all the<br>material.   | None  | Some of the lessons<br>are too easy for this<br>time of year and<br>some will be too hard<br>at the beginning of<br>the school year. The<br>length of some of the<br>lessons is too long.   |
| Q5 Strengths<br>The lessons are<br>appropriate for first<br>graders. They are<br>interesting and cover<br>curriculum required to<br>be taught.  | Teaching children the<br>characteristics of a<br>healthy friendship.<br>Teaching children<br>what it means to bully<br>someone, why they<br>bully, and how to<br>handle a person that<br>bullies.   | Children enjoy<br>learning about<br>themselves.   |
| Q4b Align with<br>Nat'l Science<br>Standards<br>The lessons for first<br>grade were aligned<br>with the Sci.<br>Standards. Much<br>of the information<br>covred in this<br>curriculum is the<br>same as what we<br>are required by our<br>district to teach.  | It meets Standard 5.  |   |
| Q3 Ineffective<br>Components  | Nothing was difficult<br>to use. However, I<br>do think teacher's will<br>pick and choose<br>which sections to<br>use in a lesson. I<br>don't feel all five<br>areas of the lesson<br>are needed in some<br>of the lessons to get<br>the point across to<br>the students. | Poe   |
| Q2 Effective<br>Components<br>The engagement<br>activities seemed to<br>be the most effective.<br>The students<br>showed real interest<br>in the activities. Any<br>of the hands-on<br>activities went over<br>really well with my<br>students. They<br>especially enjoyed<br>the seed soaking<br>lesson. | It was all easy to use.<br>However, we have<br>not yet received the<br>cultural component<br>that is being written<br>by the Haskell<br>students.   | The lessons were<br>written to be easy to<br>use (developmentally<br>appropriate for<br>kindergarten).  |
| School Lesson Topic<br>7 Plant part and their<br>functions<br>Life cycle of a plant<br>Transporting seeds<br>People need plants<br>Parts of plants we<br>eat  | Friendship<br>Healthy Friendships<br>A Person Who Bullies<br>and Victims  | Preventing Conflicts:<br>My Friends and<br>Myself plus the<br>extension lesson<br>My Family and My<br>Friends,<br>Communicating with<br>Family and Friends<br>topics: students<br>learn about self, how<br>we are alke and<br>different, ways to be<br>responsible and<br>respectful, and |
| ID Schoo<br>26 7  | 27 7  | 7   |
|   | F 00  |   |

#### Haskell Pilot Testing – Spring 2005 Ten DETS Lessons

























#### DETS Pilot Test Lesson Feedback Form Woodlands Wisdom/Leech Lake



| Data period:       | March 2005: 12/04 through 3/05 |
|--------------------|--------------------------------|
| # of surveys:      | 4                              |
| Grade Level range: | 4-6                            |

| The l    | esson components belo                                   | w were:     | very clear              | clear        | unclear   | very unclear |
|----------|---|-------------|-------------------------|--------------|-----------|--------------|
| 1.       | Lesson Goal   |             | □ 50%                   | □ 50%        |           |              |
| 2.       | Lesson Objectives                                       |             | □ 25%                   | □ 75%        |           |              |
| 3.       | Vocabulary  |             | □ 25%                   | □ 75%        |           |              |
| 4.       | Material List   |             | <b>5</b> 0%             | □ 50%        |           |              |
| 5.<br>6. | National Science Sta<br>American Indian                 | ndards      | □ 50%                   | □ 50%        |           |              |
|          | Content Standards                                       |             | □ 75%                   | <b>🗖</b> 25% |           |              |
| 7.       | State Standards   |             | □ 25%                   | <b>D</b> 25% |           |              |
| 8.       | Assessment  |             | □ 75%                   | □ 25%        |           |              |
| Over     | all   |             |                         |              |           |              |
| 9.       | Student participation                                   | was:        |                         |              |           |              |
|          |   | 🗖 lov       | v                       | 🗖 averag     | je 25%    | 🗖 high 75%   |
| 10.      | Diabetes awareness c                                    | ontent was  |                         |              |           |              |
|          |   | 🗖 ins       | sufficient              | 🗖 adequa     | ate 100%  | 🗖 excessive  |
| 11.      | Science content was:                                    |             |                         |              |           |              |
|          |   | 🗆 ins       | sufficient              | 🗆 adequa     | ate 100%  | 🗖 excessive  |
| 12.      | For teachers lesson w                                   | las:        |                         |              |           |              |
|          | 🗖 teac  | her friendl | ly 75% 🗖 co             | nfusing      | 🗖 too co  | mplicated    |
| 13.      | For students lesson w                                   | las:        |                         |              |           |              |
|          |   | 🗖 too eas   | y ⊐j                    | ust right 10 | 0% 🗖 too  | o difficult  |
| 14.      | Lesson length was:                                      | 🗖 too long  | g 25% 🗖 j               | ust right 75 | 5% 🗖 too  | o short      |
| 15.      | Also, lesson was:                                       | 🗖 other: :  | See attached            | table        |           |              |
| 16.      |   | orting mate | erials<br>ached table _ |              | e 25% 🗖 a | ssessments   |
| 17.      | Briefly comment on lesson strengths: See attached table |             |                         |              |           |              |

18. Briefly comment on areas that need improvement: See attached table

Thanks for the data!

|  | Additional Comments          | (15) not too long (16b) game<br>ideas or worksheets   | (16b) inservice for teachers<br>not familiar with Native<br>American culture. I am<br>interested to see how this<br>goes with more time and<br>additional practice. | (15) length was adapted   |                                      |
|--|------------------------------|---|---|---|--------------------------------------|
| aluation Form  | Q18 areas to improve         | Most of my classes, I only<br>will have 30 mins, if lucky, to<br>instruct them, work, assist<br>them, and correct them. The<br>kids don't want to sit and<br>listen to you more than 2-3<br>mins. | Organization: Table of<br>contents, Index, page #'s   |   |                                      |
| Narrative Responses to DETS Pilot Test Lesson Evaluation Form<br>Woodlands Wisdom/Leech Lake | Q17 Strengths                | Easy to understand<br>Vocabulary. Easy to<br>associate the common found<br>food in their cupboards with<br>carbohydrate list.   | definitions at beginning help<br>with vocabulary  | Materials supplied and<br>relevance to games fun and<br>posters | very relevant to students'<br>lives! |
| ssponses to DET<br>Woodlands V   | Actual duration Lesson Topic | Sugar is a<br>Carbohydrate  | Wild Rice   | Native American of<br>the Day                                   | Math: Calorie Burn                   |
| Narrative Re   | Actual duration              | 3 30 min<br>sessions  | close, takes<br>longer the first<br>time through, but<br>I see 40-50 as a<br>good<br>approximation  | close   | 45                                   |
|  | Listed<br>duration           | 3 40-50<br>min<br>sessions  | 40-50   | 40-50/day   | 80                                   |
|  | ID School# Grade             | <u>ସ-</u> ତ   | 4-5   | 4-5   | 5-6                                  |
|  | D Scho                       | 27 11   | 28 10   | 29 10   | 30 10                                |
|  | _                            |   |   |   |                                      |

| DETS Pilot Test Teac   | her Web Surve         | ey                         |                                     |
|--|-----------------------|----------------------------|-------------------------------------|
| Fort Peck Commu  | nity College          |                            |                                     |
| Data period: May 2005-July 2005<br># of surveys: 3   |                       |                            |                                     |
| Grade Level range: K and 5   |                       |                            |                                     |
| Background Data  |                       |                            |                                     |
| A. How many DETS lessons have you taught c   | during the Pilot Test |                            |                                     |
|  |                       | 3 <sub>5</sub> C           | more than 5                         |
| 67%  | 33%                   |                            |                                     |
| B. About how many of your students particip  |                       |                            |                                     |
| C 1 to 10 C 11 to 20 C   | 21 to 30              | 31 to 40                   | More than 40<br>33%                 |
| C. Briefly list the <i>topics</i> and <i>names</i> of the D                                  | DETS lessons that ye  | ou taught. <u>See atta</u> |                                     |
| Survey Questions   |                       |                            |                                     |
| 1. Overall, how would you rate the content of  | these lessons for y   | our students?              |                                     |
| too easy   | just right            | 🕻 too di                   | fficult                             |
| 2. Overall, which lesson components (e.g., goo<br>content, assessments, etc.) were particula | al statements, stando |                            | •                                   |
| 3. Overall, which lesson components (e.g., goo<br>content, assessments, etc.) were particula |                       |                            | •                                   |
| 4. From your perspective were the lessons th<br>National Science Standards?                  | nat you taught from   | the DETS curriculu         | m adequately aligned with the       |
| C yes 100%   | 🗖 <sub>no</sub>       |                            |                                     |
| Please briefly elaborate. See attached   |                       |                            |                                     |
| 5. In general what have been the strengths o   | of the DETS lessons   | thus far? <u>See at</u>    | tached table                        |
| 6. In general what areas of the DETS lesson  | s that you taught ne  | ed improvement?            | See attached table                  |
| <ol> <li>Please take a final moment to provide us w<br/>thus far.</li> </ol>                 | ith a couple of overc | Ill ratings on your e      | xperiences with the DETS curriculum |
| a. From a teacher's perspective how  | w easy-to-use is the  | DETS curriculum?           |                                     |
| very difficult to use  | C difficult to us     | se Ceasy to<br>67%         | use very easy to use 33%            |
| b. Compared to other science curric curric   | culum that you have   |                            |                                     |
| <b>F</b> <sup>-3</sup>   | C unenagaina          | 0                          |                                     |
| very unengaging  | unengaging            | C <sub>engagi</sub><br>67% | ng very engaging<br>33%             |
| 8. Please describe what kind of support o<br>See attached table                              | or assistance you w   | ould need to fully         | implement the DETS curriculum.      |

Thanks for your help!

|              | ts Standards Q5 Strengths    | The tipi food model    | rires was represented the food and Culture into the | I great hands on model |                    | on was manipulate. Healthy topics. Using DETS | nd could food choices- lessons and adding | Ider emphasizing meat writing, literature, | specifically and science, math, and | relating it to how it our own culture has | kept tribes healthy. been exciting. |                    |                         |             |                       |                  |                      |    |
|--------------|------------------------------|------------------------|---|------------------------|--------------------|---|---|--|-------------------------------------|---|-------------------------------------|--------------------|-------------------------|-------------|-----------------------|------------------|----------------------|----|
| ∩o looffooti | U3 Inerrective<br>Components | The literature choices | without pictures was                                | Kindergarten class.    | had to paraphrase, | the information was                           | necessary and could                       | be read to older                           | students.                           |   |                                     |                    |                         |             |                       |                  |                      |    |
|              | uz Errective<br>Components   | The "Tipi Food Model"  | was a great visual<br>model for the class to        | relate to and          | visualize the food | groups. The changes                           | that the traditional                      | food model used for                        | our Native                          | Americans-lowering                        | the servings of grains              | and starches for a | healthier diet is vital | for disease | prevention. The class | has a first hand | knowledge of buffalo |    |
|              | Lesson Topic                 | Buffalo: A Healthy     | Choice  |                        |                    |   |   |  |                                     |   |                                     |                    |                         |             |                       |                  |                      |    |
|              | ID School Lesson             | 7 9                    |   |                        |                    |   |   |  |                                     |   |                                     |                    |                         |             |                       |                  |                      |    |
|              |                              | 37                     |   |                        |                    |   |   |  |                                     |   |                                     |                    |                         |             |                       |                  | E                    | Ξ- |

prior knowledge. My class was able to have an elder bring in a buffalo hide and the

students enjoyed the activity and saw the size of 1 buffalo hide. The most amazing

activity was the laying out of 25 hides to show what was needed to make a tipi after the buffalo fed the tribe. The numerous ways our tribe used the buffalo meat was interesting also.

# Report Date: 9/21/2005

# Narrative Responses to DETS Pilot Test Lesson Web Survey Fort Peck Community College

Our own tipi food model. Q6 Areas to Improve

## Q8 Additional Comments

We had to share the literature and tipi food model.

| Q8 Additional<br>Comments                    | I would need to help<br>on developing the<br>materials provided for<br>the lesson being<br>taught.  | It fits in with our<br>current Health<br>curriculum.  |
|--|---|---|
| Q6 Areas to<br>Improve                       | Vocabulary for this<br>particular lesson could<br>use some<br>improvement and the<br>materials needed be<br>prepared in advance<br>for this lesson<br>because there is a lot<br>of preparation time<br>needed to prepare<br>some of the materials<br>in the lessons.  | More hands-on,or<br>inquiry activities<br>would be helpful.   |
| Q5 Strengths                                 | I feel that this<br>particular lesson<br>strengths was to give<br>the students an idea<br>of how the buffalo<br>historically influenced<br>personal health<br>behaviors with the<br>Native Americans<br>long ago.   | The lessons are more<br>indepth than what we<br>have been teaching<br>for<br>the past 2 or 3 years. |
| Q4b Align with<br>Nat'l Science<br>Standards | The national science<br>standards that were to<br>be addressed was to<br>develop and<br>understanding of<br>personal health.<br>(F)   |   |
| Q3 Ineffective<br>Components                 | In the buffalo unit<br>there was a book that<br>was a little to difficult<br>read and keep the<br>children's attention.<br>This particular book<br>was quite lenghthy<br>and the children lost<br>interest right away. I<br>will look for a<br>different book to read<br>to the children, to<br>keep their interest.<br>So I guess I would<br>say that this book<br>was ineffective. If I<br>am unable to find a<br>different book I would<br>paraphase this<br>particular book to<br>keep the children's<br>attention. | The cut-out of the digestive system was difficult for some students.                                |
| Q2 Effective<br>Components                   | For the buffalo unit<br>the goal statements,<br>standards,<br>vocabulary, cultural<br>content, science<br>content and<br>assessments were<br>effective and easy to<br>use.  | Objectives,<br>Vocabulary,Science<br>Content  |
| School Lesson Topic                          | Vegetables and<br>Grains<br>Buffalo - Meat  | Diabetes: Circulatory<br>System, Digestive<br>System, Endocrine<br>System,<br>Excretory System      |
| ID Schoo                                     | ი<br>8  | 2<br>3<br>3   |
|  |   |   |

Report Date: 9/21/2005

#### DETS Pilot Test Lesson Feedback Form Keweenaw Bay Ojibwa Community College



very unclear

unclear

| Data p | period:         | February 2005 - | June 2005  |             |
|--------|-----------------|-----------------|------------|-------------|
| # of s | Surveys:        | 5               |            |             |
| Grade  | Level range:    | 1               |            |             |
| The le | sson component  | s below were:   | very clear | clear       |
| 1.     | Lesson Goal     |                 | □60%       | □40%        |
| 2.     | Lesson Objectiv | ves             | □60%       | <b>□40%</b> |
| 3.     | Vocabulary      |                 | □100%      |             |
| 4.     | Material List   |                 | □60%       | <b>□40%</b> |

| 2. | Lesson Objectives          | □60%  | □40%  |  |
|----|----------------------------|-------|-------|--|
| 3. | Vocabulary                 | □100% |       |  |
| 4. | Material List              | □60%  | □40%  |  |
| 5. | National Science Standards |       | □100% |  |
| 6. | American Indian            |       |       |  |
|    | Content Standards          |       | □100% |  |
| 7. | State Standards            |       | □100% |  |
| 8. | Assessment                 |       | □100% |  |

#### Overall

| 9.  | Student participation                                   | was:                  |          |                    |          |                   |  |
|-----|---|-----------------------|----------|--------------------|----------|-------------------|--|
|     |   | 🗖 low                 |          | 🗆 average 20       | )%       | 🗖 high <b>80%</b> |  |
| 10. | Diabetes awareness o                                    | ontent was:           |          |                    |          |                   |  |
|     |   | 🗆 insufficie          | nt       | 🗆 adequate 1       | 100%     | excessive         |  |
| 11. | Science content was:                                    |                       |          |                    |          |                   |  |
|     |   | 🗆 insufficie          | nt       | 🗆 adequate 1       | 100%     | excessive         |  |
| 12. | For teachers lesson w                                   | /as:                  |          |                    |          |                   |  |
|     | 🗖 teacher   | friendly 100%         | 🗆 conf   | using 🗆            | 1 too co | mplicated         |  |
| 13. | For students lesson w                                   | as:                   |          |                    |          |                   |  |
|     |   | 🗖 too easy            | 🗖 jus    | t right <b>80%</b> | 🗖 too    | difficult 20%     |  |
| 14. | Lesson length was:                                      | 🗖 too long <b>20%</b> | 🗖 jus    | t right <b>80%</b> | 🗖 too    | short             |  |
| 15. | Also, lesson was:                                       | 🗖 other: See att      | ached to | able               |          |                   |  |
| 16. | This lesson needs mo                                    | re:                   |          |                    |          |                   |  |
|     | 🗆 supporting materials 🛛 🗖 inservice 🗖 assessments      |                       |          |                    |          |                   |  |
|     | 🗖 othe  | r: See attached to    | ıble     |                    |          |                   |  |
| 17. | Briefly comment on lesson strengths: See attached table |                       |          |                    |          |                   |  |

18. Briefly comment on areas that need improvement: See attached table

Thanks for the data!

|                                     | Additional Comments          | (13) too difficult for my grade<br>level (I geared down). (16) I<br>used materials I had on hand<br>as well as things I collected<br>at my teacher inservice. I<br>had good materials supplied<br>by Dr. Mary H.   | (15) a good companion to<br>other science lessons I do.   | Needed to gear down, content (15) fun stories and activities.<br>& time wise, for my students<br>and that made it just right.   |
|-------------------------------------|------------------------------|--|---|---|
| y College                           | Q18 areas to improve         | I think I just need to get more<br>books for my classroom to<br>better show the Native<br>American culture and<br>customs. The children were<br>really intrigued by it all   |   | Needed to gear down, conten<br>& time wise, for my students<br>and that made it just right.                                     |
| weenaw Bay Ojibwa Community College | Q17 Strengths                | It gave a good introduction to<br>the Native Am. In our region<br>and in general the children<br>were interested in the various<br>needs and cultural<br>differences the Native<br>American had compared to<br>our needs, how they had to<br>live off the land as hunters &<br>gatherers, etc. | Dr. Mary came in and did a<br>wonderful presentation on<br>animals in nature and had<br>several books to show the<br>children about the various<br>animals that habitate our<br>region. She discussed the<br>animal food chain and let the<br>children act out the plants<br>(herbivores) and animals<br>(carnivores) and how they<br>work together to provide a<br>healthy life for all. Was just<br>right for my grade level. | Students loved the stories<br>and activities and learned the<br>lessons about using our<br>senses and gifts to stay<br>healthy. |
| (KB <i>OCC</i> ) Keweenaw Bc        | Actual duration Lesson Topic | Native Am.<br>Heritage - Harvest<br>from Mother Earth:<br>Traditional Native<br>Am. Diet &<br>Exercise   | Animals in Nature -<br>Every Body's some<br>Body's Lunch  | Using Senses to<br>Stay Healthy and<br>Survive - Exploring<br>Nature with all<br>senses turned on                               |
| $\smile$                            | Actu                         | 35   | о́е   | 40  |
|                                     | Listed<br>duration           | 45-60  | 45-60   | 45-60   |
|                                     | ID School# Grade             | <del>6</del>   | θ   | <del>0</del>  |
|                                     | school                       | 15   | 15  | 15  |
|                                     | D<br>D                       | 124  | 125   | 126   |
|                                     |                              |  |   |   |

Narrative Responses to DETS Pilot Test Lesson Evaluation Form

Report Date: 9/21/2005

| e Additional Comments        | wn to (15) a compliment to our<br>le regular science lessons (16)<br>was good and very enjoyable<br>for kids.  | s is (15) a good compliment to<br>other Science/Health units I<br>use like the Dole 5 a day<br>Program.(16) I had lots of<br>things for children that I<br>gathered at my Oct. 2004<br>inservice.                             |
|------------------------------|--|---|
| Q18 areas to improve         | I just needed to gear down to<br>best suit my young grade<br>level and all was just fine.  | Thought this was fine as is   |
| Q17 Strengths                | The children really loved this<br>lesson because animals are a<br>favorite topic of study for<br>them. I have many wonderful<br>lndian tales of the various<br>animals Native Americans<br>wrote of and passed on<br>through the generations. They<br>understood the cycle of life<br>in the animal kingdom very<br>well and the Native American<br>way of using everything to<br>the fullest. | The children liked learning<br>about foods they eat and<br>what Native Americans did as<br>they lived off the land and<br>how they eat the same types<br>of foods as we do now. They<br>have seen the Food pyramid<br>before. |
| Actual duration Lesson Topic | Animals in an<br>Ecosystem - All<br>things in nature are<br>linked: All animals<br>need to make<br>healthy choices   | The Food Pyramid -<br>The Body's Needs: Balancing food,<br>water, rest &<br>exercise  |
|                              | 35-40  | 30  |
| Listed<br>duration           | 45-60  | 45-60   |
| ID School# Grade             | 127 15 <b>1B</b>   | 128 15 1B   |

Report Date: 9/21/2005

| DET                                     | S Pilo               | t Test Teac             | her \        | Web Sur                        | vey            |  | a second s |
|---|----------------------|-------------------------|--------------|--------------------------------|----------------|--|---|
|   | •                    | jibwa Comn              | nunit        | y College                      | e (KBOCC       | :)   |   |
| Data period: May 3<br># of surveys: 2   | 2005-J               | uly 2005                |              |                                |                |  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
| Grade Level range                       | : 1, 8-              | 12                      |              |                                |                |  |   |
| <b>Background Data</b>                  |                      |                         |              |                                |                |  |   |
| A. How many DETS                        |                      | • •                     | -            |                                |                |  |   |
|   | C 2                  | C 3                     | C            | 4                              | C 5            | 🖸 more tha   | n 5   |
| 50%                                     |                      |                         |              |                                | 50%            |  |   |
| B. About how many                       |                      |                         |              |                                |                |  |   |
| 1 to 10                                 | L                    | 11 to 20<br>50%         | 21<br>509    |                                | 🗳 31 to 40     | C More th  | nan 40  |
| C. Briefly list the te                  | opics and            | d <i>names</i> of the I | DETS I       | essons that                    | you taught.    | See attached table                                   |   |
| Survey Questions                        |                      |                         |              |                                |                |  |   |
| 1. Overall, how woul                    | •                    |                         |              |                                | •              |  |   |
|   |                      | too easy                | <u>(</u>     | <sup>3</sup> just righ<br>100% | † 🖸            | too difficult  |   |
|   | •                    |                         |              |                                |                | ials list, vocabular<br><mark>See attached to</mark> | y, cultural content, science<br><b>able</b>   |
|   | •                    |                         |              |                                |                | ials list, vocabular<br>use? <u>See attac</u> h      | y, cultural content, science<br>1 <mark>ed table</mark>   |
| 4. From your perspe<br>National Science | Standard             | ds?                     | -            | -                              |                | curriculum adequat                                   | ely aligned with the  |
|   |                      | yes 100%                |              |                                |                |  |   |
| Please briefly ela                      | borate.              | <u>See attached</u>     | <u>table</u> |                                |                |  |   |
| 5. In general what h                    | ave beer             | the strengths o         | of the       | DETS lessor                    | ns thus far?   | See attached to                                      | able  |
| 6. In general what c                    | reas of t            | the DETS lesson         | s that       | you taught r                   | need improve   | ment? <u>See attac</u>                               | <u>:hed table</u>   |
| 7. Please take a find<br>thus far.      | l momen <sup>.</sup> | t to provide us w       | vith a c     | ouple of ove                   | rall ratings o | n your experience                                    | s with the DETS curriculum  |
| a. From a                               | teacher':            | s perspective ho        | w easy       | -to-use is th                  | ne DETS curr   | riculum?   |   |
|   | very di              | fficult to use          | 0            | difficult to                   | use            | easy to use<br><b>100%</b>                           | very easy to use  |
| b. Compar<br>curricul                   |                      | er science curri        | culum t      | that you hav                   | e taught, hov  |  | r students was the DETS   |
| C                                       |                      | engaging                | C            | unengaging                     |                | engaging<br>100%                                     | C very engaging   |
|   | what ki<br>tached    | ••                      | or assi      | stance you                     |                |  | nt the DETS curriculum.   |

Thanks for your help!

Narrative Responses to DETS Pilot Test Lesson Web Survey (KBOCC) Keweenaw Bay Ojibwa Community College

# School Lesson Topic ₽

35

Balancing food, water, 2. Using senses to be with all senses turned healthy and survive and exercise -- "The need to make healty 1.The food pyramid "Exploring Nature things in nature are rest and exercise" ecosystem; simple linked: all animals outdoor detective" on: becoming an 3. Animals in an ood chains--"All Body's Needs: 15

# Components Q2 Effective

Q3 Ineffective Components

all were helpful

vocabulary, cultural content, science

content

Q4b Align with Nat'l Science Standards

already taught in our complemented them lessons and these Many areas were regular science

# **Q5** Strengths

Opened up new areas of thinking for me as taught the children. These lessons were Wonderful materials great and gave me new ideas on other things I could do in the classroom. and books.

lesson content and timewise students both in

## Q8 Additional Comments

Q6 Areas to Improve

classroom to talk and vist with the children. Americans visit the Have more Native needed to gear down for my younger level

workshops like the Get more books to one we had last share with the More teacher students. summer.

Report Date: 9/21/2005

Native American Diet

and Activity"

Earth: Traditional

strategies in nature--

4. Animal survival

ood choices."

Everybody needs to

live where lunch is

available"

5. Native American

culture -- "Harvest

from our Mother

Somebody's Lunch:

'Everybody's

| Q8 Additional<br>Comments                    |   |
|--|---|
| Q6 Areas to<br>Improve                       | The concept map,<br>seemed difficult to<br>convey and for the<br>students to interact.  |
| Q5 Strengths                                 | Increasing the students diabetes through scientific inquiry, comparing their viewpoints with community perspectives, looking for the disconnects and similarities.  |
| Q4b Align with<br>Nat'l Science<br>Standards | It fulfills Science<br>Standard A: Science<br>as inquiry, abilities<br>necessary to do<br>scientific inquiry and<br>understanding about<br>scientific inquiry.<br>Content Standard F:<br>Personal and<br>community health,<br>student perspectives<br>and community<br>perspectives as they<br>relate to diabetes<br>knowledge. This also<br>falls under Content<br>Standard G: Historical<br>perspectives. |
| Q3 Ineffective<br>Components                 | The Concept Map,<br>needs modification. I<br>forsee this unit<br>being used with<br>students that have<br>had some prior basic<br>diabetes knowledge or<br>coursework.<br>F   |
| Q2 Effective<br>Components                   | The strongest<br>component of this<br>lesson plan was the<br>preparation and<br>simulation of<br>interviewing<br>procedures. Plus, the<br>actual interview<br>process and reporting<br>presentations. Both<br>an English and<br>Science course might<br>find these lessons<br>appropriate.  |
| ID School Lesson Topic                       | 40 16 Introduction to<br>Qualitative Methods:<br>Diabetes as Seen by<br>the Community<br>the Community  |

Report Date: 9/21/2005



| Data period:       | May 2005 - June 2005   |
|--------------------|------------------------|
| # of surveys:      | 44                     |
| Grade Level range: | 6 -8 and Special Needs |

| The lesson components below were:   |  | very clear         | clear   | unclear   | very unclear                                 |                      |  |  |
|---|--|--------------------|---|---|--|----------------------|--|--|
| 1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7.  | Lesson Goal<br>Lesson Objectives<br>Vocabulary<br>Material List<br>National Science Sta<br>American Indian<br>Content Standards<br>State Standards |                    | □ 68%<br>□ 56%<br>□ 58%<br>□ 53%<br>□ 62%<br>□ 58%<br>□ 50% | <ul> <li>32%</li> <li>44%</li> <li>30%</li> <li>40%</li> <li>27%</li> <li>32%</li> <li>41%</li> </ul> | □<br>□ 12%<br>□ 7%<br>□ 11%<br>□ 11%<br>□ 9% |                      |  |  |
| 8.  | Assessment   |                    | □ 52%   | □ 41%   | □ 7%   |                      |  |  |
| Overall   |  |                    |   |   |  |                      |  |  |
| 9.  | Student participation  | n was:<br>□ low 7' | %   | 🗆 average 3   | <b>0% ⊡</b> h                                | iigh <b>63%</b>      |  |  |
| 10.   | Diabetes awareness content was:<br>insufficient 7% 🗖 adequate 84% 🗖 excessive 9%   |                    |   |   |  |                      |  |  |
| 11.   | Science content was  |                    | ficient 10%   | 🗆 adequate (  | 66% □e                                       | excessive <b>24%</b> |  |  |
| 12.   | •  |                    |   |   |  |                      |  |  |
| 13.   | · · · ·  |                    |   |   |  |                      |  |  |
| 14.   | Lesson length was:   | 🗆 too long         | •   | just right 74   |  |                      |  |  |
| 15.   | Also, lesson was: 🛛 other: See attached table  |                    |   |   |  |                      |  |  |
| <ul> <li>16. This lesson needs more:</li> <li> I supporting materials 79% I inservice 21% I assessments 21% </li> </ul> |  |                    |   |   |  |                      |  |  |
| 17.   | Briefly comment on lesson strengths: See attached table  |                    |   |   |  |                      |  |  |

18. Briefly comment on areas that need improvement: See attached table

Thanks for the data!
|  | Additional Comments          |  | (15) Fun for students.   |   |  | (15) Some students related<br>this story to a ride at<br>Disneyland (Splash<br>Mountain). |   | The idea of handing<br>something to students was a<br>good idea and served to<br>encourage students to<br>continue. I plan to use it in the<br>future for walking activities.<br>(15) Fun because students<br>were outside. |
|--|------------------------------|--|--|---|--|---|---|---|
| Institute  | Q18 areas to improve         |  |  |   |  |   |   |   |
| (SIPI) Southwestern Indian Polytechnic Institute | Q17 Strengths                | I used this lesson during L.A.<br>and S.S. (When introducing<br>Ancient Greece). Students<br>enjoyed listening to the<br>fables. | Students enjoyed figuring out<br>how people have different<br>traits. The lesson did bring up<br>many questions. | Students made their own<br>petroglyphs and they really<br>enjoyed this. | Students came up with some interesting ideas on what petroglyphs mean. | Story was interesting and captured students' attention.                                   | Students seemed to finally<br>get petroglyphs and<br>communication. They enjoyed<br>modern petroglyphs. | The personal nature of this lesson was quite positive. Students shared stats and understood that none of them were exactly the same.  |
| outhwestern                                      | Lesson Topic                 | Aesop's Fables   | Reebop Lesson  | How were the<br>Petroglyphs Made  | What was the<br>Subject Matter on<br>the Petroglyphs                   | Uncle Remus<br>Brer Rabbit  | Exploring Modern<br>Day Petroglyphs   | Lesson 4 Walking<br>Fitness Self-Test or<br>Straw Test  |
| (SIPI) S   | Actual duration Lesson Topic | 150 min  | 100 min (2 class<br>periods)   | 100   | 100 min  | 100 min   | 4 days  | 45 min  |
|  | Listed<br>duration           | 50-60  | 50 min   | 50  | 100 min  | 50-60 min   | 2-3 days  | 20-40 min   |
|  | School# Grade                | Q  | Q  | 9   | 9  | Q   | Q   | ω   |
|  |                              | 80 12  | 81 12  | 82 12   | 83 12  | 84 12   | 85 12   | 86 12   |
|  | ₽                            | -  |  |   |  | -   | -   |   |

Narrative Responses to DETS Pilot Test Lesson Evaluation Form

| ₽  | Schoo | ID School# Grade | Listed<br>duration | Actual duration Les | Lesson Topic                          | Q17 Strengths  | Q18 areas to improve  | Additional Comments  |
|----|-------|------------------|--------------------|---------------------|---------------------------------------|--|---|--|
| 87 | 12    | ы                | 30-50              | +09                 | Lesson #5 - Setting<br>a Walking Goal | Students enjoyed setting<br>goals, but didn't seem quite<br>able to set realistic goals<br>based on information at<br>hand. As the program<br>progressed, students began<br>to see their goals needed<br>adjustment, as many were<br>too high/low. | Students had difficulty<br>finding pulses when heart<br>rates were checked. A<br>stethoscope might make<br>taking a pulse a bit more<br>interesting for this age group.   | Students enjoyed choosing names for their teams.   |
| 8  | 12    | Ŋ                | 20                 | 50                  | Lesson #6 -<br>Walking Rules          | Students enjoyed route<br>variation and felt good about<br>being allowed to walk on a<br>"special" trail or route that<br>others have not been<br>allowed to use.  | Some students feel walking<br>tends to be boring. I added<br>the incentive of portable CD's<br>to encourage students to<br>want to walk. Singing didn't<br>quite work, but many of the<br>boys enjoyed cadence and<br>what amounted to military   | Extra emphasis had to be put<br>on WALKING rather than<br>RUNNING. The attitude tends<br>to be that walking is for older<br>people, such as their<br>teacher. (16) needs more<br>incentives to encourage<br>walking. |
| 89 | 12    | IJ               |                    |                     | Lesson #8 -<br>Stretching             | Students enjoyed the idea<br>that they were given a<br>choice of stretches. Girls<br>preferred a certain type,<br>while boys preferred another   | Handouts were needed so<br>students could refer to the<br>stretches in the future,<br>although stretches will be<br>incorporated<br>before/following walking<br>exercise.   | (16b) needs more handouts  |
| 6  | 12    | Q                | 0                  | <u>ත</u>            | Lesson #9 -<br>Hydration              | Students enjoyed the personal nature of the lesson   | More visuals (overheads)<br>could have been included<br>with the lesson as time is of<br>essence to prepare these for<br>students. Students could be<br>asked to create visuals in<br>groups and make<br>presentations to the class<br>perhaps as | (16b) Colorful charts and/or<br>graphs are good for visual<br>learners (PowerPoint).   |
| 91 | 12    | ω                |                    | 120 min             | Lesson 1, Part 1                      | I liked how organized it was   | I felt incapable of really<br>discussing the science<br>part/chromosomes/DNA/gene<br>s but I got through it.  | (15) Students really were<br>interested and concerned. I<br>was surprised at how high<br>student participation was.  |

| ₽   | Schoo | School# Grade          | Listed<br>duration | Actual duration Lesson Topic                                  | Lesson Topic  |   | Q18 areas to improve  | Additional Comments  |
|-----|-------|------------------------|--------------------|---|---|---|---|--|
| 92  | 12    | ω                      |                    | 160   | Lesson 2, Part 2  | My students are so excited<br>about these lessons, they<br>are making a booklet to share<br>and keep  | n/a   | <ul> <li>(15) Lesson was</li> <li>informative, I'm even learning!</li> <li>(16a) Needs more inservice</li> <li>(DNA, Cell, Chromosome)</li> <li>I'm not a science person.</li> </ul> |
| 93  | 12    | ω                      |                    | 160 mins  | Lesson 3 Causes<br>of Diabetes                                    | I love the vocabulary and the<br>very friendly overhead<br>transparencies.  | n/a   | (15) Still keeping their interest)   |
| 94  | 12    | ω                      |                    | 160 mins  | Unit 1 - Folktales  | Discussions on<br>Myths/Legends/Folktales<br>combined this again with<br>Core lesson 1 "What is<br>Diabetes?" Students really<br>became interested in<br>integration of the literary with<br>the disease. | More devel. Of vocab For<br>legends/myths etc. maybe<br>even more books/tapes.      | (15) Extremely interesting!<br>Really got students' attention  |
| 95  | 12    | ω                      |                    | 160<br>min(book/story)<br>320 min + more<br>for the art proj. | Lesson 2 Turkey<br>Girl/ Cinderella                               | Reviewed Core Lessons 1-3.<br>Discussions on<br>traditions/daily<br>lives/exercise/lifestyles was<br>very good. Students love the<br>Art and really associated oral<br>traditions.                        | I would like to get more tribal interaction/speakers to really develop this lesson. | Did proj. related to story -Art-<br>Native Endangered<br>animals/foods.  |
| 96  | 12    | ω                      |                    | 160 min   | Unit # Lesson 1 -<br>Petroglyphs                                  |   |   |  |
| 76  | 9     | 7-8                    | 50-60              | 100-120   | Unit 1 - Folktales<br>(What are<br>Legends, Myths &<br>Folktales) | Students enjoyed Apache -<br>Coyote Tales   | none, right now   | (16b) Lesson was quite interesting.  |
| 98  | 9     | 7-8                    | 50 min             | 100 min   | Part 2 - What is<br>Diabetes                                      | liked the transparencies  |   | <ul><li>(15) lesson was interesting.</li><li>(16b) Wonderful. Can be extended to other lessons</li></ul>   |
| 66  | 9     | 7-8                    | 50                 | 50  | Part 1 - Core What<br>is Diabetes                                 |   | Need more time to make the models   | (16b) Lesson needs more<br>time and materials in our<br>school.  |
| 100 | 9     | 7-8                    |                    |   | Lesson 2 Turkey<br>Girl - Cinderella                              | The Books were interesting<br>and accepted them<br>graciously   | none  |  |
|     |       | Denort Date: 0/01/0005 |                    |   |   |   |   |  |

| _   | Schoc | School# Grade | Listed<br>duration | Actual duration | Lesson Topic   | Q17 Strengths   | Q18 areas to improve  | Additional Comments  |
|-----|-------|---------------|--------------------|-----------------|--|---|---|--|
| 101 | 9     | 7-8           |                    |                 | Lesson 2 -<br>Cinderella   | They like comparing Turkey<br>Girl, Cinderella  |   | (16b) Books were great                                       |
| 102 | 9     | 7-8           | 50                 | 100-120         | Lesson 4 Coyote<br>Tales   | Students brought their own coyote tales.  |   |  |
| 103 | 9     | 7-8           | 50-60              | 80-100          | Lesson 5 Aesop's<br>fables   | Student found some Aesop's fables from the internet   |   |  |
| 104 | 9     | 7-8           |                    |                 | Lesson 6 Uncle<br>Remus  |   | Students weren't too<br>interested in Uncle Remus   |  |
| 105 | 9     | 7-8           |                    |                 | Lesson 1 - What<br>are Petroglyphs                                   | Students enjoyed the pictures. Very exciting.   |   |  |
| 106 | Q     | 7-8           |                    |                 | Lesson 2 - Who<br>were the people<br>who made the<br>Petroglyphs     |   | Some of the students had studied the Anasazi and found it repetitive.   |  |
| 107 | 9     | 7-8           |                    |                 | Lesson 3 - How<br>were the<br>Petroglyphs made                       | Students designed their own petroglyphs   |   |  |
| 108 | 9     | 7-8           |                    |                 | Lesson 4 - Where<br>were Petroglyphs<br>found?                       | We were not able to travel,<br>but read out where<br>petroglyphs are found  |   |  |
| 109 | 9     | 7-8           | 50                 | 120-160 min     | Unit 2, Lesson #5 -<br>What was Subject<br>Matter on<br>Petroglyphs? | Students wanted to design<br>more petroglyphs on paper.   | I would need more time on<br>this lesson for activities.  |  |
| 110 | 9     | 7-8           |                    |                 | Lesson 6 -<br>Exploring Modern<br>Day Petroglyphs                    |   |   | Some students created<br>drums and smoke signal on<br>paper. |
| 111 | 12    | ~             |                    |                 | Lesson 8 - Corn  | This is not a short topic. It's<br>very important to most native<br>people. It made a very<br>interesting topic to develop<br>into multi layered tasks. | Expanded lesson ito several activities. Reading other native cultures' stories, discussion, illustration, original stories & drawings |  |
| 112 | 12    | 9             |                    |                 | Lesson 8 - Corn  |   |   | Used portfolio for 6th grades.                               |
| 113 | 12    | Q             |                    |                 | Lesson 8 - Corn  |   |   | Used portfolio for 6th grades.                               |
|     |       |               |                    |                 |  |   |   |  |

| Additional Comments          | Worked on original images &<br>writing after pottery was<br>completed |                 |   |  | E   | t   |  |
|------------------------------|---|-----------------|---|--|---|---|--|
| Q18 areas to improve         |   |                 | Encourage Special Needs teachers to have their students be part of the program.   | Using elders as speakers.  | Need more research done on<br>old patterns of designs.  | Providing student in different<br>areas of clay bed and how<br>to identify clay.  | Have input from the<br>traditional point of view.  |
| Q17 Strengths                | Great idea to use traditional<br>crops                                |                 | Special need children need to<br>be part of the diabetes<br>program. They are able to<br>produce pottery and<br>understand the basics of<br>diabetes. | Corn is so important to Native<br>American Indian because<br>we look to our mother which<br>is corn. Different colors of<br>corn represents different<br>direction; multi color<br>represents different races. | Understanding the different<br>designs and why it's so<br>important to different tribal<br>groups. Why we use corn<br>symbol. Corn is our mother. | Walked to clay bed to use<br>native clay in our own area.<br>Gathering materials<br>clay/sand, and how to<br>process the clay. Exercise<br>was used in this area. | 1&2 - Southwest Understanding the important<br>Pottery and Diabetes of pottery and why it has<br>been used by our people.<br>How they used a lot more<br>health food than what we<br>eat today. To be more aware<br>of health food with corn |
| Actual duration Lesson Topic | 2 weeks Lesson 8 - Corn   | Lesson 8 - Corn | Lesson 8 - Corn   | Lesson 8 - Corn  | 7-Designs &<br>Symbols  | 3-Making a<br>digestive system<br>using clay  | 1&2 - Southwest<br>Pottery and Diabete   |
| Listed<br>duration           |   |                 |   |  |   |   |  |
| School# Grade                | 9   | 7               | Special<br>Needs  | ω  | 6-7   | ω   | 6-7-8  |
| Schoo                        | 12  | 12              | 12  | 12   | 12  | 12  | 12   |
| ₽                            | 114   | 115             | 116   | 117  | 118   | 119   | 120  |

| Additional Comments          |  |               | Worked on original images &<br>writing after pottery was<br>completed |
|------------------------------|--|---------------|---|
| Q18 areas to improve         | Instructions be written more<br>in simple sentences for the<br>grade level we work with.<br>However the students are<br>very interested in learning.<br>Now they are more aware of<br>the kinds of food they eat.  |               |   |
| Q17 Strengths                | Diabetes is something new to Instructions be written more<br>new students I had in class. in simple sentences for the<br>Vocabulary is the hardest for<br>these grade levels. However the students are<br>very interested in learning.<br>Now they are more aware o<br>the kinds of food they eat. |               | Great idea to use Traditional<br>crops                                |
| Actual duration Lesson Topic | 60min What is Diabetes?  | Lesson 8-Corn | 2 weeks Lesson 8-Corn   |
| Listed<br>duration           |  |               |   |
| ID School# Grade             | 121 12 6-7-8   | 122 12 7      | 123 12 6  |

#### Interview with Johnie Garcia - April 21, 2005, Dulce Middle School

I met with Mr. Garcia on April 21, 2005 to review the lessons he had completed for the Language Arts/Diabetes portion of the DETS Project. He did not have the forms available at the time and stated that he would mail them to me. He subsequently mailed the forms to Carol and she forwarded them to me.

Mr. Garcia offered the following comments regarding the Language Arts/Diabetes Lessons:

- The students enjoyed the diabetes lessons on the Family Tree, although some families objected or did not wish for their child to participate in this activity. (The teacher thought it was because there were some close intermarriages.) Other objections might be related to the family's reluctance to talk about death of family members.
- The transparencies were very helpful and served to make the subject matter clearer and more interesting.
- The *Coyote Folktales* were very interesting to the students. They could relate to the Apache Coyote Folktales, some students brought in some other versions of the Coyote Tales. The Tar Baby story was not used.
- The students enjoyed the comparison between *Turkey Girl Story* and *Cinderella*. They didn't think the *Cinderella* story was too juvenile for them.
- The students especially enjoyed the Petroglyph lessons. The students drew their own petroglyphs. The drawings were displayed in the hallway. Overall the students enjoyed doing the art work that was a part of the lessons and they enjoyed sharing the stories and their art work.
- The diabetes lesson that suggested use of marshmallows was also used by another class and the students became bored with the lesson.
- It is important to know which lessons have already been used by some of the other teachers. Some of the students became bored because some other teacher had taught the same lesson.
- The diabetes lessons are very relevant to the students as diabetes is very prevalent in the Dulce community. Almost every family has a family member (relative) that is affected by the disease
- Although all teachers commented very positively on the Lessons, they all also felt that their first priority rested with meeting of the State Content Standards and Benchmarks.

#### Interview with Josette Lopez - May 26, 2005, Santo Domingo Middle School

I met with Ms. Lopez on May 26, 2005 to formally close out the DETS Program for 2005. Ms. Lopez expressed her appreciation for having had the opportunity to work with the program. She thought they were very useful to her both in her Language Arts and Social Studies curriculum. The students responded well to the diabetes portion of the lessons as students and their families are affected by this disease. She stated that she would continue to use the lessons in the upcoming school year.

Ms. Lopez felt that the students were able to understand the concepts presented in the diabetes portion of the lessons. The diabetes lessons were very relevant to the students since so many of the students have parents, grandparents or other relatives who are affected by diabetes. It was extremely gratifying to hear her speak of the lessons in this way. It appears that students have benefited greatly from these lessons.

I asked Ms. Lopez whether she was aware of the curriculum design – *Understanding by Design*. She indicated that she had not heard of it.

Overall, it has been a pleasure working with Ms. Lopez. She is enthusiastic, cooperative and overall a great teacher to work with. She carried out the lessons with much gusto and was a wonderful part of the DETS Project. I would highly recommend her participation in next year's project.

I am submitting 6 additional evaluation forms on the lessons she has completed.

#### Interview with Montana Collard – May 26, 2005, Santo Domingo Middle School

I met with Ms. Collard on May 26, 2005 to formally close out the DETS Program for 2005. Ms. Collard expressed much satisfaction with her participation in the program. Her main regret was that she had not started the lessons earlier in the year. She indicated that she was unsure about how to proceed with the lessons and her general reluctance to begin the lessons. Once she began to work with the lessons she stated that she became very enthused and excited about working with the lessons and regrets not having started earlier!

Ms Collard taught the lessons to her 8<sup>th</sup> grade Language Arts classes and Native American Studies classes. She also used the lessons with her AP (Advanced Placement) Literature class. Both groups responded well to these lessons.

She commented very positively on the following:

- Diabetes lesson on the Family Tree the students enjoyed plotting out their family trees and parents became involved in the activities contained in this lesson.
- Handouts & Overheads they were informative and students responded very positively to the science concepts contained therein.
- Pre/Post tests were well received by students. Students became very aware of their eating and exercise patterns and were able to make some changes in their habits.
- Use of library students were able to use the library to research/make booklets on planning healthy meals.
- Use of spouse (who has diabetes) Montana's husband came and spoke/demonstrated to the class about diabetic meals.
- Posters students illustrated posters using the stories they read from Pablita Velarde's book: *Old Grandfather Storyteller*.
- Integration Ms. Collard was able to integrate the science concepts contained in the diabetes portion with the Social Studies and Language Arts lessons.
- As stated previously Ms. Collard became intrigued by the lessons, and her major regret was that she had not started with the lessons sooner in the year. She states that she will definitely start with the lessons early in the coming year!

She stated that the one lesson that she had trouble with was the diabetes lesson: *REEBOP*. She indicated that she did not understand the underlying science principles contained in the lesson. She had someone with a science background help with the lesson and did the lesson a second time.

Ms. Collard also thought that In-service training on the content and use of the Units would have been very useful. I indicated that we had tried to schedule time for training but were not successful.

#### Interview with W. Thurgood - May 26, 2005, Santo Domingo Middle School

I met with Ms. Thurgood on May 26, to formally close out the DETS Program for 2005. She stated that she enjoyed working with the DETS Program, and felt that it was an excellent curriculum.

Ms. Thurgood cited the following as highlights:

- One of the major accomplishments was having the students wear their pedometers.
- Students were generally excited about the program, and were able to set their own goals, some were set too low, others too high.
- Students acquired an increased awareness of the disease.
- One student was very concerned because the grandfather had diabetes. As the student learned more about the disease the student became less worried because the student realized that diabetes was not necessarily a "death sentence" for the grandfather.

#### Concerns:

Ms. Thurgood felt like she needed more time to work on the Walking Lessons. She indicated that there were so many programs that competed for time within the teaching day.

The teacher started working late with the Walking Lessons. She felt that the PE teacher was not committed to the program and thus did not participate as fully in the program as was anticipated.

A major challenge for the teacher was to keep track of the pedometers. The students lost quite a few of the pedometers and did not complete all of the activities outlined in the walking lessons.

| DETS Pilot Test Teach   | er Web Si               | Jrvey                   |                        |                          |
|---|-------------------------|-------------------------|------------------------|--------------------------|
| Haskell Indian Natio  | ns Univer:              | sity                    |                        | formary Day<br>Arcaise   |
| Data period: May 2005-June 2005<br># of surveys: 7  |                         |                         |                        |                          |
| Grade Level range: K-2  |                         |                         |                        | •                        |
| Background Data   |                         |                         |                        |                          |
| A. How many DETS lessons have you taught du   | ring the Pilot          | Test Phase?             |                        |                          |
|   | C 4<br>29%              | -                       | more than <b>57%</b>   | 5                        |
| B. About how many of your students participat   |                         |                         | 07.0                   |                          |
| <b>C</b> <sub>1 to 10</sub> <b>C</b> <sub>11 to 20</sub> <b>C</b>                             | 21 to 30<br><b>100%</b> | C 31 to 40              | C More tha             | ın 40                    |
| C. Briefly list the <i>topics</i> and <i>names</i> of the DE                                  |                         | at you taught. So       | ee attached table      |                          |
| Survey Questions  |                         |                         |                        |                          |
| 1. Overall, how would you rate the content of t   | hese lessons f          | or your students        | \$                     |                          |
| too easy  | C just r<br>100%        | ight 🖸                  | too difficult          |                          |
| 2. Overall, which lesson components (e.g., goal content, assessments, etc.) were particularly |                         |                         | •                      |                          |
| 3. Overall, which lesson components (e.g., goal content, assessments, etc.) were particularly |                         |                         | •                      |                          |
| 4. From your perspective were the lessons tha<br>National Science Standards?                  | · -                     | rom the DETS cu         | rriculum adequate      | ly aligned with the      |
| 🖾 yes 100%  |                         | no                      |                        |                          |
| Please briefly elaborate. See attached to   | able                    |                         |                        |                          |
| 5. In general what have been the strengths of   | the DETS les            | sons thus far? <u>S</u> | <u>ee attached tab</u> | ole                      |
| 6. In general what areas of the DETS lessons  | that you taugh          | nt need improveme       | ent? <u>See attach</u> | ned table                |
| 7. Please take a final moment to provide us wit thus far.                                     | h a couple of a         | overall ratings on      | your experiences       | with the DETS curriculum |
| a. From a teacher's perspective how   | easy-to-use is          | the DETS curric         | ulum?                  |                          |
| very difficult to use   | C difficult             | to use Ce               | casy to use 5%         | very easy to use         |
| b. Compared to other science curricu curriculum?  | llum that you h         |                         |                        |                          |
| C very unengaging   | 🖸 unengagi              | -                       | engaging<br>DO%        | C very engaging          |
| 8. Please describe what kind of support or  | assistance v            |                         |                        | t the DETS curriculum.   |
| See attached table  | ,                       |                         |                        |                          |

Thanks for your help!

|                                   | Q8 Additional<br>Comments                    | I cannot answer this question as I have not seen the entire curricumlum.   |  |
|-----------------------------------|--|--|--|
|                                   | Q6 Areas to<br>Improve                       | Some of the lessons<br>are too easy for the<br>end of year and some<br>will be too hard at the<br>beginning of a school<br>year. Alos, some<br>lessons are too<br>lengthy for a<br>kindergarten child's<br>attention span.   | length of the lessons<br>needs shortened   |
| iversity                          | Q5 Strengths                                 | The children are<br>easily engaged in any<br>lessons that have to<br>do with themselves.   | The kids seem<br>interested.   |
| Aaskell Indian Nations University | Q4b Align with<br>Nat'l Science<br>Standards |  |  |
| Haskell Ind                       | Q3 Ineffective<br>Components                 | None   | enor   |
|                                   | Q2 Effective<br>Components                   | All the lessons were<br>easy enough to use<br>at this time of the<br>year. They are<br>developmentally<br>appropriate for<br>Kindergarten.   | <del></del>  |
|                                   | ID School Lesson Topic                       | 7 Preventing Conflicts:<br>My Friends and<br>Myself- all about self;<br>My Family and My<br>Friends- How I "fit"<br>into my family and<br>with my friends & how<br>we are different; and<br>All People Have<br>Feelings- all about<br>emotions and how to<br>deal with them. | 7 Preventing Conflicts:<br>All People have<br>feelings,<br>Communicating with<br>Family and<br>Friends, Family and<br>Friends, Pamily and<br>Friends Don't Always<br>Get Along, Ways to<br>Resolve conflicts<br>Setting Goals for<br>Good Health: What<br>keeps us healthy |
|                                   | S<br>D                                       | 29   | 30   |

Narrative Responses to DETS Pilot Test Lesson Web Survey

| Q8 Additional<br>Comments<br>More time in the day.<br>We have a district<br>science curriculum<br>that needs to be<br>taught,   | materials   |
|---|---|
| Q6 Areas to<br>Improve<br>We have rewritten our<br>lessons to make<br>improvements. I need<br>to see lessons from<br>others involved in the<br>program to respond.  | We still need the<br>cultural component.  |
| Q5 Strengths<br>The only lessons I<br>have seen or taught<br>have been the<br>lessons we have<br>written her a RVES.<br>Teacher friendly<br>easy to follow<br>meaningful to<br>students.  | The kids seem to<br>have a strong<br>understanding of what<br>it means to bully<br>someone, and how to<br>be healthy<br>emotionally and<br>physically.  |
| Q4b Align with<br>Nat'l Science<br>Standards  |   |
| Q3 Ineffective<br>Components<br>I found there isn't<br>always time to fit in<br>the extension<br>activity. I did not try<br>the activity for<br>Lesson 3 friendship<br>recipe.  | none<br>However, we still do<br>not have the cultural<br>component from the<br>Haskell students.  |
| Q2 Effective<br>Components<br>I feel the lessons<br>went well and the<br>children were all<br>engaged.<br>Students enjoyed<br>making the Venn<br>Diagrams in Lesson<br>1. In Lesson 2, the<br>extension activity<br>(accordian book) was<br>fun for the students<br>to make. Lesson 4:<br>Bullying Behaviors<br>we had many<br>discussions on<br>bullying in our<br>classroom starting at<br>the beginning of the<br>year. The students<br>had lots of<br>background<br>knowledge on this<br>topic. The lesson went<br>stopic. The lesson storing | all<br>The cultural<br>component has not<br>yet been developed.   |
| School Lesson Topic<br>7 Healthy Living<br>Lessons<br>Lesson 1-2<br>Friendships<br>Lesson 1 Bullying<br>Behaviors<br>Lesson 5 Teasing   | Healthy Friendships<br>Bullying Behavior<br>Why people bully<br>How to handle a<br>person who bullies<br>Using I messages<br>Determining whether it<br>is bullying behavior<br>Keeping a healthy body |
| ID School 31 7  | 32 7  |

| Q8 Additional<br>Comments<br>Some of the materials<br>we requested have<br>not been provided or<br>they are the wrong<br>thing.  |  | The consumable<br>supplies would be a<br>problem in the future,<br>as there wouldn't be a<br>grant to provide<br>these items.  |  |
|--|--|--|--|
| Q6 Areas to<br>Improve<br>Just some minor "fine<br>tuning".  |  | None   |  |
| Q5 Strengths<br>They are about the<br>right length and<br>content for young<br>children. There is a<br>good variety of<br>movement, hands on,<br>and sharing in the<br>lessons.  |  | The students have<br>especially enjoyed<br>the discussions. They<br>like talking about<br>situations they have<br>been in with their<br>friends.   |  |
| Q4b Align with<br>Nat'l Science<br>Standards   |  | The curriculum covers<br>being a healthy<br>friend and handling<br>conflicts as stated in<br>the National<br>Standards.  |  |
| Q3 Ineffective<br>Components<br>none (except we<br>decided one of the<br>cassettes of music<br>were not good and we<br>are cutting them out).  |  | The lessons have<br>been easy to use.  | none   |
| Q2 Effective<br>Components<br>They were all easy to<br>use and the children<br>were quick to catch<br>on.  |  | The friendship<br>lessons went over<br>well with my class.<br>There were several<br>qualities of being a<br>friend that my<br>students hadn't<br>thought about, such<br>as being patient and<br>helping a sick friend. | <del></del>  |
| School Lesson Topic<br>7 I've already sent in<br>the first 5 lessons.<br>This covers the next<br>6 lessons.<br>Preventing Conflicts-<br>Using "I" messages to<br>communicate what a<br>person is feeling and<br>needs; and non-<br>violent ways to solve<br>conflicts. | Setting goals for good<br>health- Ways to be<br>healthy (keep clean,<br>eat right, and keep<br>fit); how do we keep<br>clean and what tools<br>are used; specific<br>examples of ways to<br>keep fit (specific<br>ways to eat healthy,<br>etc.). | Friendship<br>Healthy Friendships<br>Bullying Behavior and<br>Being a Victim<br>Reasons some<br>People become a<br>Person that Bullies   | Setting Goals for<br>Good Health:<br>Keeping Fit,<br>Healthy Foods?,<br>Good Decisions for<br>our Lives,<br>Setting Health Goals |
| ID Schoo<br>33 7   |  | 34   | 36 7   |
|  |  |  |  |

Pre-Post Results

Royal Valley Middle School (Haskell Indian Nations University)

| cl-1<br>PRE | cl-1<br>POST | cl-2<br>PRE | cl-2<br>POST |
|-------------|--------------|-------------|--------------|
| 82          | 91           | 55          | 91           |
| 82          | 91           | 55          | 82           |
| 55          | 91           | 55          | 73           |
| 46          | 64           | 55          | 82           |
| 46          | 100          | 82          | 91           |
| 64          | 100          | 37          | 91           |
| 55          | 91           | 82          | 100          |
| 64          | 82           | 28          | 55           |
| 37          | 91           | 55          | 91           |
| 82          | 100          | 55          | 73           |
| 55          | 91           | 64          | 73           |
| 64          | 100          | 55          | 91           |
| 73          | 100          | 46          | 82           |
| 73          | 91           | 64          | 100          |
| 55          | 46           | 55          | 100          |
| 37          | 82           | 64          | 100          |
| 55          | 82           | 55          | 82           |
| 64          | 91           | 55          | 100          |
| 55          | 91           | 64          | 91           |
| 64          | 91           | 11          | 64           |
| 37          | 82           | 37          | 91           |
| 55          | 100          | 73          | 46           |
| 55          | 64           | 64          | 91           |
| 55          | 82           | 91          | 91           |
| 55          | 82           | 46          | 100          |
| 46          | 91           | 73          | 100          |
| 37          | 82           | 55          | 100          |
| 64          | 91           | 73          | 100          |
| 55          | 91           | 64          | 100          |
| 37          | 100          | 46          | 64           |
| 46          | 100          | 64          | 100          |
| 46          | 73           | 46          | 64           |
| 64          | 91           |             |              |

| DETS Pilot Test Teo   | icher Web S        | urvey                    |                            |   |
|---|--------------------|--------------------------|----------------------------|---|
| Cankdeska   | ı Cikana           |                          |                            |   |
| Data period: May 2005-July 2005<br># of surveys: 2  |                    |                          |                            | 1 A A A A A A A A A A A A A A A A A A A |
| Grade Level range: 9  |                    |                          |                            | - <b>39</b>                             |
| Background Data   |                    |                          |                            |   |
| A. How many DETS lessons have you taugh   | t during the Pilot | Test Phase?              |                            |   |
| <b>L</b> <sub>1</sub> <b>L</b> <sub>2</sub> <b>L</b> <sub>3</sub><br>100%                                 | <b>C</b> 4         | C 5                      | nore the                   | an 5                                    |
| B. About how many of your students partic   | ipated in the DET  | FS pilot lessons?        |                            |   |
| <b>L</b> 1 to 10 <b>L</b> 11 to 20  | 21 to 30<br>100%   | C 31 to 40               | C More t                   | han 40                                  |
| C. Briefly list the <i>topics</i> and <i>names</i> of the   | DETS lessons the   | hat you taught. <u>S</u> | See attached tab           | <u>le</u>                               |
| Survey Questions  |                    |                          |                            |   |
| 1. Overall, how would you rate the content  |                    |                          |                            |   |
| too easy  | C just r<br>100%   | right 🖸                  | too difficult              |   |
| <ol><li>Overall, which lesson components (e.g., g<br/>content, assessments, etc.) were particul</li></ol> | •                  |                          |                            | •                                       |
| 3. Overall, which lesson components (e.g., g<br>content, assessments, etc.) were particu                  |                    |                          |                            | •                                       |
| 4. From your perspective were the lessons<br>National Science Standards?                                  |                    |                          | urriculum adequa           | ately aligned with the                  |
| C yes 100%  |                    | no                       |                            |   |
| Please briefly elaborate. <u>See attache</u> d  | <u>d table</u>     |                          |                            |   |
| 5. In general what have been the strength   | s of the DETS les  | ssons thus far? s        | See attached t             | table                                   |
| 6. In general what areas of the DETS less   | ons that you taug  | ht need improver         | nent? <u>See atta</u>      | ched table                              |
| 7. Please take a final moment to provide us thus far.   | with a couple of   | overall ratings or       | your experience            | es with the DETS curriculum             |
| a. From a teacher's perspective h   | •                  |                          | culum?                     |   |
| very difficult to use   | C difficult        | to use                   | easy to use<br><b>100%</b> | C very easy to use                      |
| b. Compared to other science cur<br>curriculum?   | riculum that you   | have taught, how         | engaging for yo            | ur students was the DETS                |
| C very unengaging   | C unengag          | ing 🖸                    | engaging                   | <pre>very engaging 100%</pre>           |
| 8. Please describe what kind of support<br><u>See attached table</u>                                      | t or assistance y  | ou would need ·          | to fully implem            |   |

Thanks for your help!

Narrative Responses to DETS Pilot Test Lesson Web Survey

# Cankdeska Cikana

Q3 Ineffective Components The lessons were a different method by them to. We will use attend the sessions Having the elders that we expected transportation. providing

Science content, Components Q2 Effective

Culture and History,

13

4

Energy

ID School Lesson Topic

assessments, materials list

Q4b Align with Nat'l Science Standards

governing change and ailitator and students iournals, pre and post Students understood communication skills the environment and how change affects disaplines by writing lifestyles,) On-going articles, working out and group projects. Recognize the and diet 100 years various servings of comparison of life ago and now, also est, presentations internet, reading energy used in through use of assessment by computation of science based, comparison of papers, use of foods. Proper the principles integration of quality of life

with them to introduce

program so it gets

their support.

to be provided rides

and plan a meeting

Testing, unless all the

lessons are taught

results will not be

the pre-post test

lessons were taught,

Fime of year the

valid.

year had too many

nteruptions.

presentations, posters

used through oral

reports,

and spread sheets.

end of the school

## Q5 Strengths

answering questions, notes and reflection guests speaking to The involvement of use of journals for the students and and hands on activities.

students but notations

time to fit their

teachers will modify

be modified. Most

invite and they would happen so they need

Students were to

Involving elders,

will be made.

come...this did not

## Q8 Additional Comments

Q6 Areas to

mprove

community. All the students in our school 30+ miles from their Rides for the elders since our school is are bused.

complete all the tasks

Timing, students

so some of the plans needed more time to

for my lessons will

ID School Lesson Topic

13 Culture and History, Energy

42

Q2 Effective Components Science content, assessments,

materials list

## Q3 Ineffective Components

Having the elders attend the sessions that we expected them to. We will use a different method by providing transportation.

## Q4b Align with Nat'l Science Standards

answering questions, notes and reflection The involvement of guests speaking to use of journals for the students and **Q5** Strengths and hands on activities. governing change and presentations, posters ailitator and students iournals, pre and post science based, Students understood communication skills the environment and how change affects disaplines by writing ifestyles,) On-going articles, working out and spread sheets. and group projects. comparison of life and diet 100 years ago and now, also test, presentations various servings of The lessons were used through oral internet, reading through use of energy used in assessment by Recognize the computation of oods. Proper comparison of oapers, use of the principles integration of quality of life reports,

## Q6 Areas to Improve

**Q8** Additional

Comments Rides for the elders since our school is 30+ miles from their community. All the students in our school are bused.

students but notations with them to introduce festing, unless all the complete all the tasks so some of the plans needed more time to invite and they would happen so they need lessons were taught, to be provided rides and plan a meeting teachers will modify come....this did not program so it gets lessons are taught for my lessons will be modified. Most vear had too many results will not be Students were to Timing, students end of the school Fime of year the Involving elders, the pre-post test time to fit their will be made. their support. nteruptions. valid.

#### DETS Pilot Test Lesson Feedback Form (updated 2/24/06) KBOCC (Keweenaw Bay Ojibwa Community College)



| Data period:       | June 2005 |
|--------------------|-----------|
| # of surveys:      | 4         |
| Grade Level range: | 1-4       |

|      | 5                      |             |                     |                          |                  |              |
|------|------------------------|-------------|---------------------|--------------------------|------------------|--------------|
| The  | lesson components belo | w were:     | very clear          | clear                    | unclear          | very unclear |
| 1.   | Lesson Goal            |             | □ 50%               | □ 50%                    |                  |              |
| 2.   | Lesson Objectives      |             | □ 50%               | □ 50%                    |                  |              |
| 3.   | Vocabulary             |             |                     | □ 100%                   |                  |              |
| 4.   | Material List          |             | □ 25%               | □ 75%                    |                  |              |
| 5.   | National Science Sta   | ndards      | □ 100%              |                          |                  |              |
| 6.   | American Indian        |             |                     |                          |                  |              |
|      | Content Standards      |             | □ 100%              |                          |                  |              |
| 7.   | State Standards        |             | □ 100%              |                          |                  |              |
| 8.   | Assessment             |             |                     | □ 100%                   |                  |              |
|      |                        |             |                     |                          |                  |              |
| Over | all                    |             |                     |                          |                  |              |
| 9.   | Student participatior  | n was:      |                     |                          |                  |              |
|      |                        | 🗖 lov       | N                   | 🗖 average                | 2                | 🗖 high 100%  |
| 10.  | Diabetes awareness o   | content was | :                   |                          |                  |              |
|      |                        | 🗆 ins       | sufficient          | 🗖 adequa                 | te <b>100%</b>   | 🗆 excessive  |
| 11.  | Science content was:   |             |                     |                          |                  |              |
|      |                        | 🗆 ins       | sufficient 2        | 5% 🗖 adequa <sup>.</sup> | te <b>75%</b>    | excessive    |
| 12.  | For teachers lesson v  |             |                     |                          |                  |              |
| •    |                        |             | ly <b>100%</b> □ co | nfusina                  | 🗖 too cor        | nplicated    |
| 13.  | For students lesson w  |             | 7                   |                          |                  |              |
| -0.  |                        | too eas     | iy ⊡j               | just right 100           | <b>)% 🗆 t</b> oo | difficult    |
| 14.  | Lesson length was:     | 🗖 too long  | g 🗆 j               | just right 100           | <b>)% □</b> too  | short        |
| 15.  | Also, lesson was:      | 🗖 other: .  | See attached        | table                    |                  |              |
| 16.  | This lesson needs mo   | re:         |                     |                          |                  |              |
| 10.  |                        |             | erials 67%          | 🗆 inservice              | 33% □ as         | sessments    |
| 1    | 00%                    | in ing man  |                     |                          |                  |              |
| -    |                        | n. See atte | ched table          |                          |                  |              |

🗆 other: See attached table \_\_\_\_\_

- 17. Briefly comment on lesson strengths: See attached table
- 18. Briefly comment on areas that need improvement: See attached table

Thanks for the data!

Narrative Responses to DETS Pilot Test Lesson Evaluation Form (KBOCC) Keweenaw Bay Ojibwa Community College

|     |              |                |                              | (NDUCU) NEW                                   | veweeriuw du)   | eerian bay Ujidwa corrintariity correge  | y cuireye  |   |
|-----|--------------|----------------|------------------------------|---|---|--|--|---|
| ₽   | School Grade | Grade          | Listed<br>duration           | Actual<br>duration                            | Lesson Topic  | Q17 Strengths  | Q18 areas to improve   | Additional Comments   |
| 129 | 16           | 4              | 5 days(45-<br>60 min<br>each | ~7 days                                       | Everybody's<br>Somebody's Lunch                                   | Great stories. Unfortunately,<br>I got the Teacher's Guide<br>Everybody'safter I'd<br>bought my own book & used<br>it, AND thought that the T.G.<br>was just another copy of the<br>book itself. Overall<br>goals/objectives are great.  | Needs more background for<br>teachers on science<br>content. Lesson was hard to<br>follow at times. Lesson<br>needs more books, web-<br>sites, videos, hands-on<br>activities.   | see separate page:<br>"Extended comments from<br>Helen Stenvig" |
| 130 | 15           | n              | 225                          | 300   | Mother Earth  | Use of literature & movement activities. Clear focus   | Students should have a<br>background on food groups<br>prior to activity.  | see separate page:<br>"Extended comments from<br>Jamie Johnson" |
| 131 | m            | <del>د</del> . | 120<br>minutes               | 120 minutes(did<br>not use all<br>activities) | The Body's Needs:<br>Balancing Food,<br>Water, Rest &<br>Exercise | Students were attentive to<br>cultural information about<br>traditional sacred foods and<br>then exploring healthy food<br>choices they can make<br>when they are hungry<br>working together to make<br>day. Many students wanted<br>to make that snack for the<br>day. Many students wanted<br>to make that snack at home.<br>Making a book about<br>themselves was a good<br>assessment activity.(15)<br>Good use of observational<br>skills & 5 senses in<br>discovering things about the<br>world around us. | Younger children may not<br>have been able to<br>understand the good groups<br>from "My Pyramid" but the<br>Diabetes Educator created a<br>puppet show demonstrating<br>food groups that might be<br>good to include. (13) original<br>lesson was too difficult, but<br>as adapted it was just<br>right. (14) Original lesson<br>was too long, but as<br>adapted, it was just right. |   |

Report Date: 1/24/2006

| ₽   | School Grade | Grade        | Listed<br>duration | Actual<br>duration                            | Lesson Topic  | Q17 Strengths  | Q18 areas to improve  | Additional Comments |
|-----|--------------|--------------|--------------------|---|---|--|---|---------------------|
| 132 | σ            | <del>ن</del> | 120<br>minutes     | 120 minutes(did<br>not use all<br>activities) | All Animals Need<br>to Make Healthy<br>Choices: All<br>Things in Nature<br>are Linked | The students really<br>participated in identifying<br>familiar animals and what<br>they eat to stay healthy<br>then linking that to how they<br>need good food and<br>physical activity to stay<br>healthy. The puzzle &<br>pyramid blocks were a big<br>hit and the web of life game<br>was a great activity. (15) a<br>great one to use in summer<br>science camp because the<br>outdoor explorations &<br>activities worked well on<br>warm sunny days. | We were not able to fit the<br>entire lesson into this<br>session, so it had to be<br>adapted to fit our time.<br>Because it was summer<br>science camp, we did not<br>use all of the assessment<br>activities better<br>assessment strategies for<br>younger students would be<br>helpful.(13 & 14) Lesson<br>was "just right" after<br>adaptations. |                     |

Report Date: 1/24/2006

#### Extended Comments from Helen Stenvig - C.J. Sullivan Elementary - 4<sup>th</sup> grade Everybody's Somebody's Lunch (Sept.13-16, 19-21)

Before lesson one, I needed to do lessons on habitats, predator/prey, producers/consumers (herbivores, omnivores, carnivores) to make sure students had the vocabulary background.

Lessons really need to be put in a step-by-step format to be teacher friendly. Teacher background information needs to be included, clearly labeled as such.

Predacious Robin – I needed to expand/explain to kids what a food chain is. Again, I did not have the teacher's guide at the time, and realized later that the activity came from there.

I spent much time creating handouts for the students and figuring out how to make a smooth transition from one thing to the next in a lesson. Things were a bit choppy.

On day two – putting animals into categories of predator/prey – lots of debate on which an animal was; most just said animals were both. Trouble classifying them as herbivores, omnivores and carnivores. This was due to limited knowledge about an animal. Cat & Mouse tag --- sorry, I didn't get to do. Playground and gym were both in use, I guess I should have done a bit more planning ahead of time on that. (Similar, but not as complex as "O Deer" from Project Wild.)

Day three – research an animal. This took lots of time with limited success. I created a sheet to collect the data, but students couldn't find all of the information. My encyclopedias were old, so we went to the computer lab (hard to find extra time slots for the library) I couldn't find the perfect web site, but finally settled on the DNR website. I ran myself ragged trying to help all of my students. So this was frustrating at best.

Need more background info on what bears, shrews, buffalo eat, their ranges, etc. for teachers. Didn't realize that this came from that Teacher's Guide, again, until after the fact. Reference needs to be made to this book in the day by day lessons when it is used. I know it would have helped me. (That teacher's guide looks really neat!)

Day four – Mousy Math, again I had to create a handout for this lesson. Calculations not truly accurate. I guess we just need to keep in mind it is a very 'simplified' activity just to show what would happen to a population if no predators, etc. were present.

Overall, this plan has great goals and objectives. A more teacher friendly, step by step plan is needed, however. More background information needed. More references to the Teacher's Guide (page numbers) needed. Handouts for students need to be available for use. For day 3 research a list of web-sites and books that work to find all of this information is necessary. Perhaps they could create a poster from their research. This research is actually a great thing, because kids have limited knowledge on our local animals. More activities/options on ways to expand the lessons would be nice. (A list of kids' books, music/songs, web-sites, activities, and especially ways to 'artistically express' their work would be great!) Diabetes – actually, there was very limited mention of this in the whole unit, and when it was mentioned, it was almost awkward. I think we need an introduction to this unit for kids on what this unit hopes to accomplish and why, and what diabetes is. (Maybe some of this was there, and I missed it.) Teachers, too, need more information.

A resource book on food chains. ISBN: 1-58469-002-X Pass The Energy Please! By Barbara Shaw McKinney Illustrated by Chad Wallace. Kind of neat, on the back cover it starts off: "Everybody is somebody's lunch". No joke!

I truly don't intend this to sound so critical, because I think the ideas are truly wonderful! However, I mention things as honestly as I can, just because I know what I need as a teacher. It has to be as teacher user friendly as possible with all of the background information and support, lots of activities, options, and hands on activities for kids. Those will all attract teachers to use the material. If not, it will probably be shelved!

I haven't tried any of the other units, but I trust they are laid out similar to this one.

Thanks for all of your work on this necessary and valuable curriculum!

#### Extended Comments from Jamie Johnson - L'Anse - grade 3 Mother Earth (September 26-30, 2005)

Harvesting from Mother Earth

#### Day One:

The students really enjoyed listening to the two stories, Berenstain Bears and American Indian Foods. It took longer than what was listed. I broke it up over two days, spending 45 minutes a day. The Field Tag Game was a hit! The students comprehended the stories and correctly filled in the compare/contrast worksheet.

#### Day Two:

The journal article "The traditional diet and American Indian Health" was too advanced for my students. I read I before hand and gave them a summary. Perhaps there could be a different way to give students this information – a more age appropriate resource (but not sure what!) Instead of having the students journal what foods they ate the day before, I had my students keep a food journal for one day. They recorded everything they ate. Then we discussed if they thought they were healthy choices.

#### Day Three:

We role played the process of harvesting wild rice. I wish I could have had someone more knowledgeable in this subject come and discuss it but it did not work out. I did enlarge the foods model and then had them list the foods they ate during their food journal into the proper place. This way they could see how much of each food they were eating and if they were skipping a group. This went well. I did not discuss or bring in people from th4e community who use science and traditional wisdom as listed in the plans. I just didn't have the time. It would be very helpful to have a list of resources of these people so teachers do not have to look for them. (You might have it somewhere in all of our information already – just a thought!)

#### Day Four:

Compared traditional lunch with fast food. Students had a hard time understanding the concept of eating only so many calories a day. We had to discuss this and how much the average person and child should eat.

#### Day Five:

I ran out of time but did a little of what was listed. Students wrote down a healthy day.

I really wish I had more time to spend on this, but we are so busy at the beginning of the year, especially with MEAPS now. I enjoyed having these lessons and feel they are very helpful and teach a very valuable concept. I will use some information and lessons from the other units when I do life science. I hope my feedback helps you, and if there is anything else, please let me know.

#### DETS Beta Test Teacher Web Survey Stone Child College



#### Background Data:

| ID#   | 2   | State        | Montana |
|-------|-----|--------------|---------|
| Teach | er: | Teresa Olsor | n       |

#### A. How did you get involved teaching DETS lessons?

| 1      | volunteered                           |
|--------|---------------------------------------|
| 2      | word-of-mouth                         |
| 2<br>3 | mandate from principal/superintendent |
| 4      |                                       |
| 4      | other                                 |

I was asked by my principal to work with Janet Belcourt at the beginning of Unit Development

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05? 25

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?



F. Approximately what percentage of your DETS students were Native American?

100

School: Rocky Boy Jr High (School # 1 ) Grade 7th

B. What DETS-related professional development opportunities have you had since September '05?

| 1 | none                                |
|---|-------------------------------------|
| 2 | introductory inservice on diabetes  |
| 3 | advanced inservice on diabetes      |
| 4 | teacher training on DETS curriculum |
| 5 | other                               |

E. About how many of your students participated in the DETS beta lessons?

| 1 | 1 to 10      |
|---|--------------|
| 2 | 11 to 20     |
| 3 | 21 to 30     |
| 4 | 31 to 40     |
| 5 | More than 40 |
|   |              |

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06?
 10

 H. Briefly list the topics and names of the DETS lessons that you taught.
 History in the Making, Focus on Diabetes, Health is Life in Balance, The Diabetes Helath Care Clinic, Taking the Message Home

#### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

### 2. Please rate the level of engagement of your students while you were teaching these lessons.

| 1 | not engaged      |
|---|------------------|
| 2 | somewhat engaged |
| 3 | very engaged     |
| 0 | 1019 01194904    |

3. Overall, how would you rate the content of these lessons for your students?

| 1 | too easy      |
|---|---------------|
| 2 | just right    |
| 3 | too difficult |
|   | 1             |

Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

Lesson 1, History in the Making:the newspaper clipping was too difficult to understand, the story about Leonard was perfect, the clue cards were difficult, some of the questions were too difficult. Lesson 2, Focus on Diabetes: the transparencies were good, letting the students come up with their own questions loses the focus of what we want the kids to learn, teh questions became too broad. Lesson 3. Health is Life in Balance: the MyPyramid trancparency is not detailed enough, it doesn't really teach anything, the student profiles and the master sheet did not correlate very well, made the activity too difficult. Lesson 4, The Diabetes Health Care Clinic: too many professions to choose from, limit professions to just 2-3 or so. Lesson 5, Taking the Message Home: the storyboard concept was difficult for my students to understand, it was not a concept we had been exposed to before, the rubric was difficult to understand.

#### 4. How well did your students like the DETS lessons?

| really disliked them |
|----------------------|
| disliked them        |
| liked them           |
| really liked them    |
|                      |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

Overview, Major Concepts, Objectives, Photocopy list, Materials, Preparation, and Procedure (most of the directions were well done) 6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

The Information About Diabetes is too extensive for a teacher to really use. I feel that it needs to be pared down to just the vital information needed. Also, some of the directions were hard to understand although most of them were very well written. There are some mistakes in Lesson one Procedure. A couple of times we were asked to "reconvene the class" and teh meaning is not clear, were we to disband the groups, get the classes attention, or something else? A vital question was not included on Master 1.5 but was listed in the Procedure, this caused lots of confusion to me and the students. The students really enjoyed evaluating other students eating and activity profiles but the profiles do not correlate very well with teh MyPyramid worksheets. The students profiles have teh MyPyramid equivilants but teh Worksheets have the goals and totals listed in ounces and cups. In lesson 4, the students are asked to include controllable and uncontrollable factors, and

7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |

#### Please briefly elaborate.

The National Science Standard of Science as Inquiry was included, especially "an appreciation of 'how we know' what we know in science". The National Science Standard of Science in Personal and Social Perspective was included, especially in the areas of 'Personal Health', 'Risks and Benefits'. THe National Science Standard of History adn Nature of Science Standard was included, especially "Science as a Human Endeavor"

special challenges relevent to patients situation without explanation. My students were confused Also, teh students had too many health care professions to choose from, I think it would have been more effective to limit the professions to 3-4 as that was how large the groups were to be. A

physician, a diabetes educator, exercise physiologist and a registered dietician would be my sugestions. The Evaluate lesson was too complicated for what the students needed to do. The rubric simply confused my 7th graders, they

needed a simpler format/ explanation.

#### 8. In general what have been the strengths of the DETS lessons thus far?

The students really enjoyed becoming health care professions and learned a lot in that lesson. They also enjoyed being "mentors" to other students.

#### 9 In general what areas of the DETS lessons that you taught need improvement?

There are some mistakes in the written lessons that need to be corrected, especially in lesson one where a vital question was not included on the master copy. I feel that the lessons need to be adjusted to make sure that the lessons the students need to come away with are more accessable. I do not feel that wiht these lessons that the students could make the connection that they (younger students not just adults) need to be concerned with preventing diabetes or that they are able to prevent diabetes.

#### 10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.

a. How successful were you in implementing the DETS lessons?

| 1 | very unsuccessful |
|---|-------------------|
| 2 | unsuccessful      |
| 3 | successful        |
| 4 | very successful   |
|   |                   |

#### d. Overall how strong was the Native American cultural framework?

| 1 | very strong |
|---|-------------|
| 2 | strong      |
| 3 | weak        |
| 4 | very weak   |
|   |             |

b. From a teacher's perspective how easy-to-use is the DETS curriculum?



Please elaborate.

c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?



#### 11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

I think that all I would need would be just changes and modifications to the lessons themselves.

#### DETS Beta Test Teacher Web Survey Stone Child College



#### Background Data:

ID# 3 State Montana Teacher: Temina Olson

#### A. How did you get involved teaching DETS lessons?

| 1 | volunteered                           |
|---|---------------------------------------|
| 2 | word-of-mouth                         |
| 3 | mandate from principal/superintendent |
| 4 | other                                 |

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05? 0

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?

| 1 | 1           |
|---|-------------|
| 2 | 2           |
| 3 | 3           |
| 4 | 4           |
| 5 | 5           |
| 6 | more than 5 |
|   |             |

F. Approximately what percentage of your DETS students were Native American?

95

#### School: Box Elder Schools (School # 2)

Grade 8th

B. What DETS-related professional development opportunities have you had since September '05?

| 1 |  |  |  |
|---|--|--|--|
|   |  |  |  |

none

| 2 | introductory inservice on diabetes  |
|---|-------------------------------------|
| 3 | advanced inservice on diabetes      |
| 4 | teacher training on DETS curriculum |
| 5 | other                               |

| E. About how many of your | students participated in the DETS |
|---------------------------|-----------------------------------|
| beta lessons?             |                                   |

| 1 | 1 to 10      |
|---|--------------|
| 2 | 11 to 20     |
| 3 | 21 to 30     |
| 4 | 31 to 40     |
| 5 | More than 40 |

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06? 8

#### H. Briefly list the topics and names of the DETS lessons that you taught.

History In The Making which was a short history of diabetes, Focus on Diabetes which included information about what diabetes is. Health is life in balance which talked about good health choices. Diabetes Health Care Clinic which talked about ways that a team of professionals could help a patient or someone at risk for diabetes. Taking the message home was a compiling of everything that the students had learned about diabetes in the lessons.

#### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

| 2. | Please rate the level of engagement of your students while |
|----|--|
| yo | u were teaching these lessons.                             |

| 1 | not engaged      |  |
|---|------------------|--|
| 2 | somewhat engaged |  |
| 3 | very engaged     |  |

3. Overall, how would you rate the content of these lessons for your students?

| 1 | too easy      |
|---|---------------|
| 2 | just right    |
| 3 | too difficult |
|   |               |

#### 4. How well did your students like the DETS lessons?

| 1 | really disliked them |
|---|----------------------|
| 2 | disliked them        |
| 3 | liked them           |
| 4 | really liked them    |
|   |                      |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

In lesson 1 the students were able to relate to Leonard well because he was a child. The students also knew a little bit about diabetes because most of the students had a family member who has diabetes. Vocabulary was fine. Cultural content was great. Science content was fine. Assessments were fine. Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

The content of the information was just right for 8th grade. I think the times when the students had to go out and find information about diabetes was a little difficult for them because I don't think that they have to do that very often. I do think that it was a good tool to make the students find information on their own.

6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

Question #2 Master 1.5 was confusing for the students. There were only 6 clue cards instead of 8 in the first lesson. On lesson # 2 I don't think that every student needs a copy of the transparencies unless they can not see the projector. On lesson # 3 Master 3.8 it says that Jessica is 12 years old but it also says she does not have PE because she is a senior in high school. I feel that an example letter for lesson # 3 would really help the students know what a specific letter would look like. I don't think that there should be more that 3 goal statements for each lesson. I don't think that the students will be able to meet more than three goals a lesson. The standards were fine. The materials list was ok. I think that it might be hard to compile the amount of information needed so that the students can research diabetes. I had a lot of reference books about diabetes in my classroom but a worry about a teacher who does not have those resources available to them.

7. From your perspective were the lessons that you taught from Please briefly elaborate. the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |
|   |                  |

#### 8. In general what have been the strengths of the DETS lessons thus far?

The strength of the lessons is that they are able to cover a broad topic in a very short amount of time.

#### 9 In general what areas of the DETS lessons that you taught need improvement?

I think there were to many transparencies and paper to work with for the lessons. I have not thought of a way to fix that though. I also think that if you give each student a folder it would help them keep track of their diabetes information.

10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.





b. From a teacher's perspective how easy-to-use is the DETS curriculum?



c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?



11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum. More reference material for the students and teacher. Maybe some supplies for the lessons.

Please elaborate.

#### DETS Beta Test Teacher Web Survey Stone Child College



#### Background Data:

ID# 4 State MT Teacher: Richard Jones

#### A. How did you get involved teaching DETS lessons?

| 1 | volunteered                           |
|---|---------------------------------------|
| 2 | word-of-mouth                         |
| 3 | mandate from principal/superintendent |
| 4 | other                                 |
|   |                                       |

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05? NA

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?

| 1 | 1           |
|---|-------------|
| 2 | 2           |
| 3 | 3           |
| 4 | 4           |
| 5 | 5           |
| 6 | more than 5 |

F. Approximately what percentage of your DETS students were Native American?

40

H. Briefly list the topics and names of the DETS lessons that you taught. Lessons 1-3

#### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

3. Overall, how would you rate the content of these lessons for your students?

| 1 | too easy      |
|---|---------------|
| 2 | just right    |
| 3 | too difficult |
|   |               |
|   |               |

#### Report Date: 6/20/2006

#### School: Crossroads Alternative HS (School # 17)

Grade 9-12

B. What DETS-related professional development opportunities have you had since September '05?



none

| 2 | introductory inservice on diabetes  |  |
|---|-------------------------------------|--|
| 3 | advanced inservice on diabetes      |  |
| 4 | teacher training on DETS curriculum |  |
| 5 | other                               |  |

| E. About how many of your | r students participated in the DETS | ; |
|---------------------------|-------------------------------------|---|
| beta lessons?             |                                     |   |

| 1 | 1 to 10      |
|---|--------------|
| 2 | 11 to 20     |
| 3 | 21 to 30     |
| 4 | 31 to 40     |
| 5 | More than 40 |

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06?

10

2. Please rate the level of engagement of your students while you were teaching these lessons.

| 1 | not engaged      |
|---|------------------|
| 2 | somewhat engaged |
| 3 | very engaged     |
|   |                  |

Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

The vocabulary and reading level were somewhat higher than my students were ready for. The case studies in lesson 3 were not interesting to

#### the students.

4. How well did your students like the DETS lessons?

| 1 | really disliked them |
|---|----------------------|
| 2 | disliked them        |
| 3 | liked them           |
| 4 | really liked them    |
|   |                      |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

Teaching instructions were very helpful

7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |
|   |                  |

8. In general what have been the strengths of the DETS lessons thus far? Linked health issue directly to Native Americans

9 In general what areas of the DETS lessons that you taught need improvement? I think there needs to be more reality in the time requirment to comple the lessons as written

10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.



1 very strong 2 strong 3 weak

very weak

b. From a teacher's perspective how easy-to-use is the DETS curriculum?



Please elaborate.

6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

Vocabulary was a challenge for my students

Please briefly elaborate.

I believe that DETS did a very good job in aligning with the National Standards

c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?



11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

More time to prepare the lessons. It would also be helpful if color transparencies were included in the materials. Not all schools have access to color coping.

#### Interview with Teresa Olson April 28, 2006

TERESA: This is Teresa Olson.

DOUG: Hi, Teresa. Thanks for calling.

TERESA: No problem. How are you?

DOUG: I'm doing great. How are things out in Montana?

TERESA: Beautiful. It's really nice right now.

DOUG: It's -- what's the temperature?

TERESA: Oh, it's supposed to be in the 70s. I don't know if it's quite that warm.

DOUG: Oh my.

TERESA: Blue sky and sunshine and green grass.

DOUG: Yeah, same in Maryland.

TERESA: Yeah?

DOUG: Spring is so wonderful.

TERESA: Isn't it? Did you get my extra notes?

DOUG: I did, and I appreciate that. About how much time do we have? Not that we'll take it all.

TERESA: Oh, ten, fifteen minutes.

DOUG: Okay. That's perfect.

TERESA: Okay.

TERESA: Okay, all right.

DOUG: Okay. That's terrific. The general focus of my questions would be things that would make the lesson more age-appropriate from your perspective.

TERESA: Okay.

DOUG: Ways to help teacher – and ways to help teachers succeed with a more open-ended, inquiry approach, studentgenerated questions.

TERESA: Okay, okay.

DOUG: And I thought maybe the best way to go about this is just to cruise through the specifics on the lessons. I want to compliment you on the detail with which you've commented on the lesson, which I know Janet appreciates, and certainly I do.

TERESA: Thank you.

DOUG: On the first lessons, you made a couple of comments on the masters, for example.

TERESA: Yes. There are some mistakes on the masters.

DOUG: Right. And for example, the first master was hard to read.

TERESA: Yeah. When I discussed it with the aid in my classroom and the kids in my classroom, we don't even think it should even be in there.

DOUG: Okay.

- TERESA: It's actually very distracting because the kids get frustrated because it doesn't make sense to them and it's hard to read.
- DOUG: Okay. It doesn't link clearly to the second master, which is --

TERESA: No.

- DOUG: -- Leonard Thompson's condition.
- TERESA: No.
- DOUG: So, if they had a newspaper article that had -- about a medical discovery that may be linked more closely to Leonard Thompson, that might be a good idea.
- TERESA: Right. I really think that you don't even need other things -- anything other than the Leonard Thomas --Thompson story.
- DOUG: Okay.
- TERESA: He -- that story really hooks the kids. They really like reading that, and it was short enough that I think it could be the hook.
- DOUG: Good. Related to that, Teresa, how much time did the first lesson take, and would this actually help in terms of the time, cutting? TERESA: Yeah, it was a little long, longer than they planned and what it said. One -- one or two class periods. Okay. We spent quite a bit of time on that first master because we were trying to understand it, trying to see what it was saying.

DOUG: Okay.

TERESA: And we didn't really gain anything from it.

DOUG: Okay.

TERESA: So, if you get rid of that, the time that they have listed is going to be about right.

DOUG: Okay. Good. Now, you said the next -- the clue cards were a little too complex. There are six clue cards.

TERESA: Yeah. When I look at those clue cards -- find them here.

DOUG: Yeah.

- TERESA: I'm wondering if it's necessary for the stuff in there that talks about how the pancreas makes two types of chemicals, how one goes through a tube and how the other goes right into the--
- DOUG: Bloodstream.

TERESA: -- bloodstream. And I'm wondering if they need to know the difference.

DOUG: I think -- that's a good point, and I think the intent there had to do with sort of scientific inquiry --

TERESA: Yeah.

- DOUG: -- which is, if the dog doesn't develop diabetes even though the tube is cut, what does that say about the nature of the insertion of the chemical into the system.
- TERESA: Yeah, yeah.

DOUG: And I think that was the intent.

TERESA: My kids actually were having trouble. Maybe it's the way it was presented, because they haven't seen the clue cards before. But they were having trouble completely understanding what each clue card was saying. Are you looking at the clue cards right now?

DOUG: Yes.

TERESA: Okay. If you look at the bottom of the last one, Number Six, there.

DOUG: "If the pancreas is cut completely"?

TERESA: Yeah. I'm wondering if you could just get rid of that whole second part, "If the grafted pancreas is later removed from the dog's body altogether, the dog does develop diabetes." I don't know if that would get rid of the context or not.

DOUG: That's an excellent suggestion.

TERESA: Yeah. And I was just thinking, maybe just shorten them a bit somehow.

DOUG: Make them more declarative and --

TERESA: Yeah.

DOUG: -- just single sentences.

TERESA: Yeah.

DOUG: Okay. All right. That's an excellent suggestion. It took me a few minutes to figure it out, and I think part of what hung me up was the complexity of the sentences.

TERESA: Yeah.

DOUG: So I'll pass that on.

TERESA: Okay.

DOUG: Then you made a series of comments about the questions, Number Six, Number Seven, Number Eight.

TERESA: Yeah.

DOUG: Which were fairly straightforward, I thought.

TERESA: Yeah, yeah.

DOUG: Okay.

TERESA: But, did you see my one where it's missing that vital question?

DOUG: Yes. "If diabetes is the reason which glucose is not moving through cells, what does that" -- okay.

TERESA: And I honestly think that if the kids would have had that question, or if I would have caught it before I did the lesson, that their answers would have been more correct.

DOUG: Okay.

TERESA: Because I really think that one is important.

DOUG: Okay. Good. That's good. And you did emphasize that, and I'll pass on your thoughts about the lesson to Janet, also.

TERESA: Okay, okay.

DOUG: Lesson Two, Teresa, "Focus on Diabetes." You like the transparencies.

TERESA: Yes, very much. I want to go back to Master 1.6, though.

DOUG: Okay.

TERESA: Did you see my comment that it mentions the picture below and there is no picture below?

DOUG: Yes.

TERESA: Okay.

DOUG: That's a very -- that's a very good comment.

TERESA: Okay.

DOUG: Yeah.

TERESA: All right.

DOUG: The essential question from Lesson Two was the students generating questions versus the teacher.
TERESA: Yeah.

- DOUG: And here's my question: to the extent that the developers want to have it as inquiry-based as possible, where students are generating questions, what suggestions do you have to guide the question development so they become more focused instead of too dispersed?
- TERESA: I think, have one or two questions that are given to the students. "Okay, these are -- this is what you have to research. Now you come up with some other ones," and do that at the beginning. For example, what is -- maybe even just, "What is diabetes?"
- DOUG: Good, good. So, seed questions. I think that's an excellent suggestion.
- TERESA: Yeah. And then -- or maybe give more specific lead-in questions, like "What age do you think people get diabetes at?" or something to make them think about that.
- DOUG: Okay. That's an excellent suggestion.

The third lesson, your main comment was, "The 'My Period' was not detailed enough," and I take that to mean it wasn't bad, it just wasn't detailed enough for the lesson.

TERESA: Right. The "My Period" that you can get on the Internet -- the one that they have included with the lesson isn't as detailed as some of the others they have on the Internet. Like, there's one that's actually, I think, a poster that says more. It has kids doing more activities and then it's -- under "Grains" it says "Make half your grains whole" and "Vary your veggies," and that sort of stuff. It's just more detailed.

DOUG: Yeah, yeah.

TERESA: And it's better. The other one really didn't say much, and so you would have to do more research.

DOUG: Yes.

TERESA: Because the lesson asks you to talk to the kids about it.

DOUG: Right.

TERESA: So, and I like this other one better.

DOUG: Okay. So that's a good suggestion, and it's specific enough that the developers can follow that suggestion.

- TERESA: Okay.
- DOUG: Teresa, moving on to Lesson Four, there are two things I noticed. One is that you say that your students liked this lesson the best, and the second, contrasting comment is that there were too many professions to choose from.

TERESA: Yeah.

- DOUG: How do you reconcile the fact that the students liked it but there were too many lessons to choose from -- professions to choose from?
- TERESA: Too many careers to choose from. They liked being health care professionals. They really enjoyed that. But I noticed that if the kids took -- that if there wasn't somebody in the group that was like a physician, they didn't seem to come up with clear enough goals for their patient. Does that make sense? Like, okay, a podiatrist. I know that podiatrists are very important in diabetes, but I don't know if it was for this lesson because --

DOUG: Okay.

TERESA: They were supposed to be the health care professional and they were supposed to talk about -- a podiatrist would talk about foot care. And that didn't enter into a lot of the case scenarios.

DOUG: Okay. So "podiatrist," for example, was too oblique --

TERESA: Yes.

DOUG: -- to the central lesson.

TERESA: Yes.

DOUG: Okay. So I'll make that recommendation.

TERESA: Okay.

DOUG: The fifth lesson was interesting to me because you like the idea of taking the message home --

TERESA: Right.

- DOUG: -- but the storyboard concept was difficult. Speak to that a little bit.
- TERESA: Okay. None of us knew what a storyboard was, which is not good, I suppose. But I did a little research, and the other teachers told me that it was like a comic strip-type thing or that you did a series of pictures.

DOUG: Okay.

- TERESA: So I explained it to the kids that way, that they would be doing a series of pictures. In the questions, your presentation should include answers. For my seventh graders, that was overwhelming, the list of things that they had to do. And the rubric was overwhelming to the kids.
- DOUG: Right, right. What they had to produce.
- TERESA: Yeah. And it was -- when my kids look at a sheet that has a whole bunch of questions, some of them just shut down. They can't -- they don't even want to try and understand it, even if I'm reading it to them and trying to make them understand. They want it shorter.

DOUG: Right, okay. So, shorten the rubric.

TERESA: Yeah.

DOUG: But you do like the idea of taking the message home --

TERESA: Yes. They did, too.

DOUG: The students liked it?

TERESA: Yeah, yeah.

DOUG: Okay. A couple last questions here, Teresa, because we are now into the eleventh minute of our call

TERESA: We're doing fine.

DOUG: Okay. Good, good. Speak to the time factor for Lessons Two through Five. We spoke about Lesson One being a little bit long, but taking out Master 1.1 will help. How about Lessons Two, Three, Four, and Five?

TERESA: Time-wise, it seemed to go pretty well, according to what they asked for.

DOUG: Good. And as you progressed through the lesson, how much did you go your own way versus how much did you stick with the script?

TERESA: I stuck with the script simply because I thought, as a beta test, I should.

DOUG: Yes, that's -- that's exactly why. So you didn't feel -- how comfortable did you feel sticking with the script?

TERESA: So-so. There were things I would have liked to have done differently. I would have liked to have directed them more. I tried to direct them to where the kids realized that it's not just older people that get diabetes, but I didn't want to direct too much in that way, and they did not catch that.

DOUG: They didn't see it as an adolescent problem.

TERESA: Right, right.

DOUG: Interesting.

TERESA: Yeah.

DOUG: Okay. So, maybe little examples about adolescents getting type II diabetes.

TERESA: Yeah, and I think you could work that into their research.

DOUG: Okay.

TERESA: You know, something like "Do kids ever get diabetes?"

- DOUG: Okay. All right. How helpful were the teacher's notes? I know you said they were extensive. What -- how would you suggest improving them?
- TERESA: I didn't use them at all. To me, just looking through them, they were really overwhelming to me, and I've actually had quite a bit of, like, training. I don't think it's necessary -- all of this is necessary for what we're teaching. If we were going more in-depth, maybe. I think teachers just need to know the basics, that diabetes is because your blood sugar is too high and these are the reasons it can be too high and the risk factors. My own personal bias is, the biggest message we should have is that it is preventable, that if you exercise and eat right you can, in many cases, prevent diabetes.
- DOUG: You know, it's interesting because I've noticed in some of the field visits I've made that students have a sense of an inevitability.

TERESA: Yes.

DOUG: They -- and I was in a fifth grade class in New Mexico. Every single student, eighteen students, raised their hand when the teacher asked if they had experience with diabetes.

TERESA: Yeah, yeah. They do in my classes, too.

DOUG: Is that right?

- TERESA: Almost every kid will raise their hand. They know someone who has diabetes. Yeah.
- DOUG: As you look over the lesson relative to making it more age-appropriate, returning to the general focus, and making sure that it's inquiry-based, which is more open-ended, student-generated things, what other suggestions would you have?
- TERESA: Actually, I don't know if I have any other ones. I think more lead-in questions to the research to get them just more focused. And I really do think the -- where they're the health care professionals, if you don't give them so many choices for a health care professional, if they know that they're the doctor or the nurse or the exercise physiologist, they can focus on what their health care professional would tell the patient, and I think they would learn a lot from that.
- DOUG: Good. Last question. You answered on your survey, the Web survey, "Please describe what kind of support or assistance you would need to fully implement the curriculum," and you wrote, "I think that all I would need would be changes and modifications to the lessons themselves."

TERESA: Yes. That was sort of a dumb answer.

DOUG: No, no. I took it to mean the things that you had already described before.

TERESA: Yes, yes.

DOUG: Detail would be sufficient to make the lesson work better.

TERESA: I do.

DOUG: And so the criticisms are more specific than, you know, "Throw the lesson out with the baby."

TERESA: Oh, yeah. No, I think they're really pretty good. And the kids really did like a couple of them.

DOUG: No, that's great.

TERESA: I do want to make a comment, though.

DOUG: Yes.

TERESA: I put down that I put ten hours, and it should be twenty hours.

DOUG: Twenty hours? Okay.

TERESA: Yeah. If that makes a difference.

DOUG: Well --

TERESA: I actually taught two classes, and it took me ten hours of class.

DOUG: Ten hours of class.

TERESA: Yeah.

- DOUG: Okay. That's good. This is an aside thing. You sent me some nice data on the pre-post. Is there any way that you could send me a spreadsheet with students -- not their names, but Student One, Two, Three, Four -- their pre-test score, and their post-test score?
- TERESA: Okay. Yeah. I do not have Excel on my computer, but I can figure something out.
- DOUG: Oh, Teresa, you don't even have to worry about it because I'll just -- just put it in the e-mail, Student One, Two, Three, and then indent the pre-test --

TERESA: Yeah, okay.

DOUG: That would be -- make it real easy. And I'll send you an e-mail reminder on that.

TERESA: Okay, okay.

DOUG: Well, we're going on twenty minutes. This is -- this is terrific. Any other final comments?

- TERESA: No, no. I think that helps, though.
- DOUG: Well, it helps tremendously, Teresa. And I want to wish you a great weekend, and thanks -- thanks again very much for your hard work.

TERESA: You are welcome.

DOUG: Take good care.

TERESA: Thanks, Doug.

DOUG: Bye.

TERESA: Bye.



Beta test Results June 20<sup>th</sup>, 2006 Report Date Stone Child College Box Elder High School

## DETS Science Unit on Diabetes Spring 2006 Final Survey

We want to hear from you! Your ideas are important to us. Please complete this three-page survey about the lessons on diabetes that you just finished. This survey will help your teachers make this a better science unit. There are no right or wrong answers. Thanks!

| Teacher's Name: | Temina Olson          |
|-----------------|-----------------------|
| School:         | Box Elder High School |
| Date:           | Spring 2006           |

1. I thought that these lessons were:

| <b>5.6 %</b> too easy <b>94.4 %</b> just right <b>0 %</b> too diff | 🔓 too difficult |
|--|-----------------|
|--|-----------------|

2. Please take a moment to think about the five lessons. These lessons are listed below. For each lesson, please check the box that tells us how much you feel <u>you learned</u>.

| Lesson Title                               |                      |                              |                          |                    |
|--|----------------------|------------------------------|--------------------------|--------------------|
|  | I learned<br>nothing | I learned<br>a little<br>bit | I learned<br>some things | I learned<br>a lot |
|  | 1                    | 2                            | 3                        | 4                  |
| LESSON ONE: History<br>in the Making       | 0 %                  | 41.2 %                       | 35.3 %                   | 23.5 %             |
| LESSON TWO: Focus on<br>Diabetes           | 0 %                  | 25.0 %                       | 50.0 %                   | 25.0 %             |
| LESSON THREE: Health<br>is Life in Balance | 0 %                  | 22.2 %                       | 55.6 %                   | 22.2 %             |
| LESSON FOUR: The<br>Community Care Clinic  | 0 %                  | 35.3 %                       | 41.2 %                   | 23.5 %             |
| LESSON FIVE: Taking<br>the Message Home    | 11.1 %               | 22.2 %                       | 38.9 %                   | 27.8 %             |

Beta test Results June 20<sup>th</sup>, 2006 Report Date Stone Child College Box Elder High School

| For each statement, indicate the<br>extent to which you agree or disagree. |   | Pre<br>Attitude Mean | Post<br>Attitude Mean |   |
|--|---|----------------------|-----------------------|---|
| 1.   | I am curious about the world in<br>which we live.                                   | 3.58                 | 4.06                  |   |
| 2.   | Science lessons are fun.  | 3.25                 | 3.67                  |   |
| 3.   | I would like to belong to a science<br>club.  | 2.625                | 3.06                  |   |
| 4.   | I would prefer to do experiments<br>than to read about them.                        | 4.42                 | 4.06                  |   |
| 5.   | Working in a science laboratory<br>would be an interesting way to<br>make a living. | 3.71                 | 3.33                  |   |
| 6.   | I would like to teach science when<br>I leave school.                               | 2.04                 | 2.39                  |   |
| 7.   | School should have more science<br>lessons each week.                               | 2.25                 | 2.94                  | * |
| 8.   | A job as a scientist would be interesting.  | 3.33                 | 3.24                  |   |
| 9.   | I look forward to science lessons.  | 2.71                 | 3.06                  |   |
| 10.  | I would like to be a scientist when<br>I leave school.                              | 2.125                | 2.82                  |   |
| 0  | verall Mean   | 3.00                 | 3.26                  |   |

\* Statistically Significant

Beta test Results June 20<sup>th</sup>, 2006 Report Date Stone Child College Box Elder High School

### Box Elder Beta Test Achievement Data (May 2006; N=20)





Beta test Results June 20<sup>th</sup>, 2006 Report Date Stone Child College Rocky Boy Jr. High

## DETS Science Unit on Diabetes Spring 2006 Final Survey

We want to hear from you! Your ideas are important to us. Please complete this three-page survey about the lessons on diabetes that you just finished. This survey will help your teachers make this a better science unit. There are no right or wrong answers. Thanks!

| Teacher's Name: | Teresa Olson       |
|-----------------|--------------------|
| School:         | Rocky Boy Jr. High |
| Date:           | Spring 2006        |

1. I thought that these lessons were:

| <b>6.7%</b> too easy | 93.3% just right | 0% too difficult |
|----------------------|------------------|------------------|
|----------------------|------------------|------------------|

2. Please take a moment to think about the five lessons. These lessons are listed below. For each lesson, please check the box that tells us how much you feel <u>you learned</u>.

| Lesson Title                               |                      |                              |                          |                    |
|--|----------------------|------------------------------|--------------------------|--------------------|
|  | I learned<br>nothing | I learned<br>a little<br>bit | I learned<br>some things | I learned<br>a lot |
|  | 1                    | 2                            | 3                        | 4                  |
| LESSON ONE: History<br>in the Making       | 3.5%                 | 34.5%                        | 37.9%                    | 24.1%              |
| LESSON TWO: Focus on<br>Diabetes           | 3.5%                 | 17.2%                        | 44.8%                    | 34.5%              |
| LESSON THREE: Health<br>is Life in Balance | 0%                   | 23.3%                        | 43.3%                    | 33.3%              |
| LESSON FOUR: The<br>Community Care Clinic  | 10.3%                | 10.3%                        | 27.6%                    | 51.7%              |
| LESSON FIVE: Taking<br>the Message Home    | 3.6%                 | 21.4%                        | 46.4%                    | 28.6%              |

Beta test Results June 20<sup>th</sup>, 2006 Report Date Stone Child College Rocky Boy Jr. High

|     | r each statement, indicate the<br>stent to which you agree or disagree.             | Pre<br>Attitude Mean | Post<br>Attitude Mean |   |
|-----|---|----------------------|-----------------------|---|
| 1.  | I am curious about the world in which we live.                                      | 3.56                 | 4.06                  | * |
| 2.  | Science lessons are fun.  | 3.66                 | 3.52                  |   |
| 3.  | I would like to belong to a science<br>club.  | 2.94                 | 3.15                  |   |
| 4.  | I would prefer to do experiments<br>than to read about them.                        | 4.41                 | 4.55                  |   |
| 5.  | Working in a science laboratory<br>would be an interesting way to<br>make a living. | 3.39                 | 3.55                  |   |
| 6.  | I would like to teach science when<br>I leave school.                               | 2.25                 | 2.39                  |   |
| 7.  | School should have more science<br>lessons each week.                               | 2.63                 | 3.00                  |   |
| 8.  | A job as a scientist would be interesting.  | 3.22                 | 3.39                  |   |
| 9.  | I look forward to science lessons.  | 3.13                 | 3.24                  |   |
| 10. | I would like to be a scientist when<br>I leave school.                              | 2.22                 | 2.61                  |   |
| 0   | verall Mean   | 3.14                 | 3.35                  |   |

\* Statistically Significant

Beta test Results June 20<sup>th</sup>, 2006 Report Date Stone Child College Rocky Boy Jr. High

## Rocky Boy Beta Test Achievement Data (May 2006; N=25)



## DETS Beta Test Teacher Web Survey (SIPI) Southwestern Indian Polytechnic Institute



### Background Data:

| ID#   | 5   | State        | New Mexico |
|-------|-----|--------------|------------|
| Teach | er: | Mrs. Phyllis | Jenkins    |

### A. How did you get involved teaching DETS lessons?

| 1 | volunteered               |
|---|---------------------------|
| 2 | word-of-mouth             |
| 3 | mandate from principal/su |

mandate from principal/superintendent other

Dolly Naranjo and Malinda invited our school to teach.

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05? none, this is the first.

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?



F. Approximately what percentage of your DETS students were Native American?

100

### School: Santa Clara Day School (School # 18) Grade 6th

B. What DETS-related professional development opportunities have you had since September '05?

| 1 | none                                |
|---|-------------------------------------|
| 2 | introductory inservice on diabetes  |
| 3 | advanced inservice on diabetes      |
| 4 | teacher training on DETS curriculum |
| 5 | other                               |

## E. About how many of your students participated in the DETS beta lessons?

| 2 11 to 20<br>3 21 to 30<br>4 31 to 40 | 1 | 1 to 10      |
|--|---|--------------|
| 4 31 to 40                             | 2 | 11 to 20     |
|  | 3 | 21 to 30     |
| E Marathan 40                          | 4 | 31 to 40     |
| 5 INDIE LITATI 40                      | 5 | More than 40 |

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06?

6

H. Briefly list the topics and names of the DETS lessons that you taught.

Letter from Down Under, Changes and Choices, and Questions about Diabetes. I wanted to get to Connections but didn't.

### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

<sup>2.</sup> Please rate the level of engagement of your students while you were teaching these lessons.

| 1 | not engaged      |
|---|------------------|
| 2 | somewhat engaged |
| 3 | very engaged     |

### Report Date: 6/20/2006

3. Overall, how would you rate the content of these lessons for your students?

| 1 | too easy      |
|---|---------------|
| 2 | just right    |
| 3 | too difficult |
|   |               |

4. How well did your students like the DETS lessons?

| 1 | really disliked them |
|---|----------------------|
| 2 | disliked them        |
| 3 | liked them           |
| 4 | really liked them    |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

Goal statements helped along with the standards and the content area was easy to use for cultural.

7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |
|   | 1                |

### 8. In general what have been the strengths of the DETS lessons thus far?

The strengths centering around Grandma Velma and her life in the 1900's and comparing it to 2006. Students were full of questions.

### 9 In general what areas of the DETS lessons that you taught need improvement?

The areas of needed improvement would be with filling out surveys by students. Students love working on the computer so, once surveys are completed, they receive immediate certificate that identifies their learning with a percent varifying their knowledge.

10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.

a. How successful were you in implementing the DETS lessons?



d. Overall how strong was the Native American cultural framework?

| 1 | very strong |
|---|-------------|
| 2 | strong      |
| 3 | weak        |
| 4 | very weak   |
|   |             |

Report Date: 6/20/2006

Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

The lessons didn't overwhelm the students and it was interesting to have them work on the Lifestyle grid.

6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

I use them all.

### Please briefly elaborate.

It was aligned to New Mexico State Standards for sixth grade students.

b. From a teacher's perspective how easy-to-use is the DETS curriculum?



Please elaborate.

c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?



E - 94

### 11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

More support from CHR and from local tribal governments for students to have access to Healthy workouts. The whole community needs to provide children with a better eating habits and so forth.

## DETS Beta Test Teacher Web Survey (SIPI) Southwestern Indian Polytechnic Institute

Grade 5

2 3

5

beta lessons?

2 3

4

5



### **Background Data:**

ID# 6 State New Mexico Teacher: Ellen C. Brewer

### A. How did you get involved teaching DETS lessons?

| 1 | volunteered                           |
|---|---------------------------------------|
| 2 | word-of-mouth                         |
| 3 | mandate from principal/superintendent |
| 4 | other                                 |
|   |                                       |

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05? none

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?



F. Approximately what percentage of your DETS students were Native American?

100

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06?
 6

School: Santa Clara day School (School # 18)

introductory inservice on diabetes

advanced inservice on diabetes teacher training on DETS curriculum

have you had since September '05?

other

1 to 10

11 to 20

21 to 30

31 to 40

More than 40

B. What DETS-related professional development opportunities

E. About how many of your students participated in the DETS

H. Briefly list the topics and names of the DETS lessons that you taught. Letter from Down Under-What is a Lifestyle?, The where of Lifestyles Change and Choices Anna's Questions about Diabetes Connections-Letter to Anna

### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

2. Please rate the level of engagement of your students while you were teaching these lessons.

| 1 | not engaged      |
|---|------------------|
| 2 | somewhat engaged |
| 3 | very engaged     |
| 5 | very engaged     |

### Report Date: 6/20/2006

3. Overall, how would you rate the content of these lessons for your students?

| 1 | too easy      |
|---|---------------|
| 2 | just right    |
| 3 | too difficult |
|   |               |

4. How well did your students like the DETS lessons?

| 1 | really disliked them |
|---|----------------------|
| 2 | disliked them        |
| 3 | liked them           |
| 4 | really liked them    |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

All were teacher friendly. Having all materials ready made for us made presenting the lessons very convienent.

7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |
|   |                  |

Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

The lessons were just right because the format,vocabulary and content wre at the grade level of my studcents.

6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

There were no components that were ineffective or difficult.

Please briefly elaborate.

8. In general what have been the strengths of the DETS lessons thus far?

The strenght in the lessons are that they made the students aware of what kinds of things to do to prevent diabetes. The cultural aspect of the lessons eg.old pictures and lifestlyes were very interesting to the students.

9 In general what areas of the DETS lessons that you taught need improvement? For me the lessons were well put together.

10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.

a. How successful were you in implementing the DETS lessons?

 1
 very unsuccessful

 2
 unsuccessful

 3
 successful

 4
 very successful

d. Overall how strong was the Native American cultural framework?



b. From a teacher's perspective how easy-to-use is the DETS curriculum?



c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?



Please elaborate.

Report Date: 6/20/2006

### 11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

Having material copied for the students made it easy for me to implement the lessons. I think that if the lessons were done in the fall would be a better time for teachers to be able better implement the lesson.

## DETS Beta Test Teacher Web Survey

### Woodlands Wisdom/Leech Lake



### Background Data:

### ID# 7 State Minnesota Teacher: John Parmeter

### A. How did you get involved teaching DETS lessons?

| 1 | volunteered                           |
|---|---------------------------------------|
| 2 | word-of-mouth                         |
| 3 | mandate from principal/superintendent |
| 4 | other                                 |
|   |                                       |

Worked on the Curriculum

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05?

Developed a class curriculum on seasonal activities, many work shops on diabetes prevention

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?

| 1 | 1           |
|---|-------------|
| 2 | 2           |
| 3 | 3           |
| 4 | 4           |
| 5 | 5           |
| 6 | more than 5 |

F. Approximately what percentage of your DETS students were Native American?

100

H. Briefly list the topics and names of the DETS lessons that you taught. Environment and Seasons of the Ojibwe

### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

### School: Bug-O-Nay-Ge-Shig School (School # 19) Grade 6-8

B. What DETS-related professional development opportunities have you had since September '05?

none
 introductory inservice on diabetes
 advanced inservice on diabetes
 teacher training on DETS curriculum
 other

Wrote on diabetes, health in the traditional ways and activities

## E. About how many of your students participated in the DETS beta lessons?

| 1 | 1 to 10      |
|---|--------------|
| 2 | 11 to 20     |
| 3 | 21 to 30     |
| 4 | 31 to 40     |
| 5 | More than 40 |
|   | I            |

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06?

7

2. Please rate the level of engagement of your students while you were teaching these lessons.



### Report Date: 6/20/2006

3. Overall, how would you rate the content of these lessons for your students?

| just right    |
|---------------|
| too difficult |
| 1             |

#### 4. How well did your students like the DETS lessons?

| 1 | really disliked them |
|---|----------------------|
| 2 | disliked them        |
| 3 | liked them           |
| 4 | really liked them    |
| 1 |                      |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

Circle of balance, seasonal activities handout,

7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |
|   |                  |

8. In general what have been the strengths of the DETS lessons thus far? Culture base, standards, follows in a logical order.

- 9 In general what areas of the DETS lessons that you taught need improvement? Two of the lesons need a little more action.
- 10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.



b. From a teacher's perspective how easy-to-use is the DETS curriculum?



c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?



Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

Just right for the two that I did, but looking over lesson on may be a little in active. It may need a little more action or hands on. The two that I presented were active for the students. The students gave good responces

## 6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

The two lessons that I used I did not have any problems with. The students seemed to understand the information.the standards may be a little hard for the students to define,but the did them nicely.

### Please briefly elaborate.

I looked at the standards before I wrote any lessons, so when I gave the lessons I had no problem meeting the standards. I have used the NSF Standards before in writing. d. Overall how strong was the Native American cultural framework?

Please elaborate.

- very strong 1 strong 2 3 4 weak
- very weak
- 11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

Keep me informed of the process of writitn the curriculum, keep adding new activities, keep evaluating the curriculum.

### Site Visit Observations – Doug Coulson May 22<sup>nd</sup>, 2006

Okay, this is May  $22^{nd}$  and I've just finished my site visit at the bug school with John Parmeter, teaching seventh grade unit, Lesson 2 of the Leech Lake lessons. The sequence he followed was Lesson 1, Lesson 6, then Lesson 2, defending that on the basis that in Lesson 2 he wanted to do a compare and contrast with how things are now against how things were a hundred years ago which came up in the 6<sup>th</sup> Lesson. That seemed to be a reasonable defense of that sequence. Fifty minutes was not enough time for the lesson, particularly if there was an interest in discussing the written responses that students were making on the sheet.

John was very skilful in terms of sequencing the materials and going through the masters for lesson 2. He did it somewhat effortlessly. I went around and spoke to all the students. They seemed to like the Diabetes about average, or maybe a little below average. A couple above average, some maybe overall about average. Randy, one of the teachers at the beginning, said they seemed to be a little bit less interested and he attributed that to the fact that the students knew that this was a test curriculum and they weren't taking it as seriously as they did the regular curriculum.

One of the important features that's going to have to be emphasized in July at the Denver meeting will be the use of the pre-tests and the post-tests. John sort of jumped in with two feet to do this without doing any pre-tests or post-tests, either attitude or achievement. So that feature will have to be worked out a little bit.

The students seemed to be fairly engaged. A couple of the quiet ones–John said that they were actually "A" students, and I did notice toward the end of the class that they called John over to ask him a few questions, so I would say that they were fairly interested in it. And finally, all the students seemed to be taking things home with them relative to the first two lessons, when I asked them that question "what did they remember about the earlier lessons?" they remembered things about the importance of attending to diet and the role of exercise. And how things are changing and how it's important to keep track of that sort of thing. They, on the whole the students were shy, but they seemed to be responsive to my questions.

One other point is worth mentioning and that is the fact that John really did use the "engage" as an "engage", which is to say that he wanted to elicit responses from the students, rather than just telling them. And he did seem to follow that, although with this kind of material you could give the students even more opportunity to talk, although that would require more than a longer than 50 minute class period to accomplish.

## DETS Beta Test Teacher Web Survey

### Woodlands Wisdom/Leech Lake



### Background Data:

ID# 8 State MN Teacher: Peter Bahr

### A. How did you get involved teaching DETS lessons?

| 1 | volunteered                           |
|---|---------------------------------------|
| 2 | word-of-mouth                         |
| 3 | mandate from principal/superintendent |
| 4 | other                                 |
|   |                                       |

Was asked by another teacher

C. Approximately how many hours of DETS-related professional development opportunities have you had since May ;05?

0

D. How many DETS lessons have you taught during this phase (i.e.: January '06 through June '06)?

| 1 | 1           |
|---|-------------|
| 2 | 2           |
| 3 | 3           |
| 4 | 4           |
| 5 | 5           |
| 6 | more than 5 |

F. Approximately what percentage of your DETS students were Native American?

100

H. Briefly list the topics and names of the DETS lessons that you taught. the first unit.

### Survey Questions:

1. How age appropriate were the DETS materials for your students?

| 1 | very inappropriate |
|---|--------------------|
| 2 | inappropriate      |
| 3 | appropriate        |
| 4 | very appropriate   |

3. Overall, how would you rate the content of these lessons for your students?

| 1 | too easy      |
|---|---------------|
| 2 | just right    |
| 3 | too difficult |
|   |               |

### Report Date: 10/11/2006

### School: Bug-O-Nay-Ge-Shig (School # 19)

Grade 7

B. What DETS-related professional development opportunities have you had since September '05?



none

| 2 | introductory inservice on diabetes  |
|---|-------------------------------------|
| 3 | advanced inservice on diabetes      |
| 4 | teacher training on DETS curriculum |
| 5 | other                               |

| E. About how many of | of your | students | participated | in the DETS |
|----------------------|---------|----------|--------------|-------------|
| beta lessons?        |         |          |              |             |

| 1 | 1 to 10      |  |
|---|--------------|--|
| 2 | 11 to 20     |  |
| 3 | 21 to 30     |  |
| 4 | 31 to 40     |  |
| 5 | More than 40 |  |

G. Approximately how many classroom hours have you spent teaching DETS lessons since January '06?
 7

2. Please rate the level of engagement of your students while you were teaching these lessons.

| 1 | not engaged      |
|---|------------------|
| 2 | somewhat engaged |
| 3 | very engaged     |
|   |                  |

Please briefly explain your rating. That is, which aspects were too easy or too difficult? What made a lesson "just right" (e.g., content, format, vocabulary, etc.)

#### 4. How well did your students like the DETS lessons?

| 1      | really disliked them |
|--------|----------------------|
| 2      | disliked them        |
| 3      | liked them           |
| 3<br>4 | really liked them    |
|        |                      |

5. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly EFFECTIVE and EASY to use?

### handouts

6. Please list which lesson components (e.g., goal statements, standards, materials list, vocabulary, cultural content, science content, assessments, etc.) were particularly INEFFECTIVE and DIFFICULT to use?

discussions

Please briefly elaborate.

7. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| 1 | not aligned      |
|---|------------------|
| 2 | somewhat aligned |
| 3 | very aligned     |
| 4 | not sure         |

8. In general what have been the strengths of the DETS lessons thus far?

9 In general what areas of the DETS lessons that you taught need improvement?

10. Please take a final moment to provide us with a few more overall ratings on your experiences with the DETS curriculum thus far.

a. How successful were you in implementing the DETS lessons?

successful

American cultural framework?

strong weak very weak

very successful

d. Overall how strong was the Native

3

2 3 very unsuccessful unsuccessful b. From a teacher's perspective how easy-to-use is the DETS curriculum?



Please elaborate.

c. Compared to other science curriculum that you have taught, how engaging for your students was the DETS curriculum?

| 1 | very unengaging |
|---|-----------------|
| 2 | unengaging      |
| 3 | engaging        |
| 4 | very engaging   |
|   |                 |

11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

## Summary of Pilot & Beta Test Reports

| Report Dates≻                      | January 19, 2005<br>Pilot Data                   |               |   | May 19, 2005<br>Pilot Data                                    |   | er 21, 2005<br>: Data              |
|------------------------------------|--|---------------|---|---|---|------------------------------------|
|                                    | Feedback<br>Form                                 | Web<br>Survey | Feedback<br>Form  | Web<br>Survey   | Feedback<br>Form  | Web<br>Survey                      |
| (1) Stone<br>Child                 | 9 (gr. 7)  |               |   |   |   |                                    |
| (2) Fort Peck                      | 1 (gr. 4 – 6)                                    |               |   | 3 (gr. K)<br>2 (gr. 1)<br>2 (gr. 2)<br>1 (gr. 3)<br>1 (gr. 4) |   | 2 (gr. K)<br>1 (gr. 5)             |
| (3) KBOCC                          | 2 (gr. 1 – 4)<br>1 (gr. 6)                       |               |   |   | 5 (gr. 1B)  | 1 (gr. 1)<br>1 (gr. 8-12)          |
| (4) SIPI                           | 4 (gr. 8)  |               | 7 (gr. 5)<br>21 (gr. 6)<br>6 (gr. 6 – 7)<br>3 (gr. 7)<br>12 (gr. 8)<br>(4 interviews) |   | 17 (gr. 6)<br>1 (gr. 6 – 7)<br>2 (gr.6-7-8)<br>3 (gr. 7)<br>14 (gr. 7 – 8)<br>6 (gr. 8)<br>1 (Special<br>Needs)<br>(4 interviews) |                                    |
| (5) Haskell                        | 2 (gr. 1)<br>3 (gr. 2)<br>2 (gr. 3)<br>2 (gr. 4) |               | (pre-post)  | 1 (gr. K)<br>5 (gr. 1)<br>3 (gr. 2)<br>4 (gr. 3)<br>3 (gr. 4) | (pre-post)  | 4 (gr. K)<br>2 (gr. 1)<br>1 (gr.2) |
| (6) Cankdeska<br>Cikana            |  |               |   |   |   | 2 (gr. 9)                          |
| (7) Northwest<br>Indian<br>College |  |               |   |   |   |                                    |
| (8) Leech<br>Lake                  |  |               | 2 (gr. 4 – 5)<br>2 (gr. 5 – 6)  |   |   |                                    |
| TOTAL                              | 26   | 0             | 53  | 25  | 49  | 14                                 |

| Report Dates≻                      | January 24, 2006<br>Pilot Data      |               | June 20, 2006<br>Beta Data            |                        |                        |                                     |                      |
|------------------------------------|-------------------------------------|---------------|---------------------------------------|------------------------|------------------------|-------------------------------------|----------------------|
|                                    | Feedback<br>Form                    | Web<br>Survey | Beta Web<br>Survey                    | Pre Test               | Post Test              | Class-<br>room<br>Observa-<br>tions | Teacher<br>Interview |
| (1) Stone<br>Child                 |                                     |               | 1 (gr. 7)<br>1 (gr. 8)<br>1 (gr.9-12) | 1 (gr. 7)<br>1 (gr. 8) | 1 (gr. 7)<br>1 (gr. 8) |                                     | 1 (gr. 7)            |
| (2) Fort Peck                      |                                     |               |                                       |                        |                        |                                     |                      |
| (3) KBOCC                          | 2 (gr.1-3)<br>1 (gr.3)<br>1 (gr. 4) |               |                                       |                        |                        |                                     |                      |
| (4) SIPI                           |                                     |               | 1 (gr. 5)<br>1 (gr. 6)                | 1 (gr. 6)              |                        | 1 (gr. 6)                           |                      |
| (5) Haskell                        |                                     |               |                                       |                        |                        |                                     |                      |
| (6)Cankdeska<br>Cikana             |                                     |               |                                       |                        |                        |                                     |                      |
| (7) Northwest<br>Indian<br>College |                                     |               |                                       |                        |                        |                                     |                      |
| (8) Leech<br>Lake                  |                                     |               | 1 (gr. 6-8)                           |                        |                        | 1 (gr. 6-8)                         | 1 (gr. 6-8)          |
| TOTAL                              | 4                                   |               | 6                                     | 3                      | 2                      | 2                                   | 2                    |

| Report Dates≻                      | October 11, 2006   |             |              |                                 |                      |  |  |
|------------------------------------|--------------------|-------------|--------------|---------------------------------|----------------------|--|--|
|                                    |                    | Beta Data   |              |                                 |                      |  |  |
|                                    | Beta Web<br>Survey | Pre Test    | Post Test    | Class-room<br>Observa-<br>tions | Teacher<br>Interview |  |  |
| (1) Stone Child                    |                    | 1 (gr.9-12) | 1 (gr. 9-12) |                                 |                      |  |  |
| (2) Fort Peck                      |                    |             |              |                                 |                      |  |  |
| (3) KBOCC                          |                    |             |              |                                 |                      |  |  |
| (4) SIPI                           |                    |             | 1 (gr. 5)    |                                 |                      |  |  |
| (5) Haskell                        |                    |             |              |                                 |                      |  |  |
| (6)Cankdeska<br>Cikana             |                    |             |              |                                 |                      |  |  |
| (7) Northwest<br>Indian<br>College |                    |             |              |                                 |                      |  |  |
| (8) Leech Lake                     | 1 (gr. 7)          |             |              |                                 |                      |  |  |
| TOTAL                              |                    |             |              |                                 |                      |  |  |







## Appendix F

For Phase III DETS Evaluation Report September 2006

## **Instrumentation Binder**

## September 2006 DETS Instrumentation Binder

(Revised and Expanded)



## Table of Contents



## **DETS Pilot Instrumentation**

The purpose of the DETS Instrumentation Binder is to provide Steering Committee members and PIs with copies of evaluation surveys that are, or will be, in use for this curriculum project. Actual electronic copies are available from Doug - just call at (800) 950-9103 or email <u>Doug@pscounts.com</u> to get copies for evaluation work at your site - thanks!

| One:   | <b>Commitment Letter:</b> Fall 2004 – Important Aspects of the Pilot/Beta-Test Commitment for DETS Science: A Biology Curriculum | page F-1  |
|--------|--|-----------|
| Two:   | Photo and Video Release Form: Revised Photograph and Video Release for Diabetes Education for Tribal Schools (DETS)              | page F-2  |
| Three: | Pilot Test Lesson Evaluation Form: Fall 2004 DETS Pilot Test Lesson Evaluation Form  | page F-3  |
| Four:  | Teacher Web Survey: DETS Pilot Test Teacher Web Survey   | page F-4  |
| Five:  | Observational Protocol: Fall 2004 Prototype Observational Protocol   | page F-7  |
| Six:   | Ethnographic Interviews: Community Leader Interview  | page F-9  |
| Seven: | Student Survey: Fall 2004 Prototype 7 <sup>th</sup> Grade Student Attitude Survey  | page F-10 |
| Eight: | Unit/Lesson Topic Outlines: Fall 2004 Unit/Lesson Topic Outline  | page F-13 |
| Nine:  | <b><u>5-8 Life Science Assessment</u></b> : Fall 2004 DETS Prototype 5-8 Life Science Assessment (Achievement)                   | page F-15 |

## 2006 DETS Beta Instrumentation

These pages contain examples of current (as of 9/28/06) DETS Beta Test instrumentation. Current instrumentation for the knowledge surveys and for the attitude surveys is termed "LIVE" – that is, this instrumentation is in use during the Fall '06 Mini Beta Test.

There are also two examples of "PROTOTYPE" instrumentation – one for K-2, and the other from 9-12. This instrumentation has been developed in collaboration with the TCUs and is being incorporated into the DETS Field Test in the fall of '06.

The goal of publishing this compendium of instrumentation is to advertise its availability, its use, and the *need to standardize*.

| Ten:     | <b>DETS Beta Test Teacher Web Survey:</b> DETS Beta Test Teacher Online Survey   | page F-18   |
|----------|--|---|
| Eleven:  | <ul> <li><u>5-8 Pre/Post Beta Attitude Surveys:</u> Examples of "Live"</li> <li>5- Pre/Post Beta Attitude Surveys</li> <li>Social Studies Attitude Surveys (SIPI)</li> <li>Science Attitude Surveys (Stone Child)</li> </ul> | page F-22<br>page F-26  |
| Twelve:  | K-2 Beta Attitude Survey: Example of "Prototype" K-2 Beta<br>Attitude<br>• KBOCC   | page F-30   |
| Thirteen | <ul> <li><u>9–12 Pre/Post Beta Attitude Survey:</u> Example of<br/>"Prototype" 9-12 Pre/Post Beta Attitude Survey</li> <li>CCCC</li> </ul>   | page F-31   |
| Fourteer | <ul> <li>Pre/Post Beta Knowledge Surveys: Examples of "Live"<br/>Pre/Post Beta Knowledge Surveys</li> <li>Stone Child</li> <li>LLTC</li> </ul>   | page F-32<br>page F-36  |
|          | • Fort Peck  | page F-30<br>page F-37  |
| Fifteen: | Site Visits:<br>• Site Visit Memo<br>• Sign-up Sheet<br>• Fall 2006 Teacher Beta Test Checklist<br>• Fall 2006 Principal Investigator Checklist<br>• Beta Data Update Table.   | page F-38<br>page F-39<br>page F-40<br>page F-41<br>Page F-42 |
|          | - r  |   |



## Fall 2004 - Important Aspects of the Pilot/Beta-Test Commitment for DETS Science: A Biology Curriculum

- 1. The Pilot and Beta Test Phases of the DETS Science: A Biology Curriculum extends through June 2005.
- 2. Teacher commitment to evaluation effort helps the DETS project in 3 ways:
  - a. Provides student and teacher data to improve the curriculum as it gets developed
  - b. Assists curriculum writers
  - c. Generates data on curriculum effectiveness that can be used by schools and school districts when adoption decisions are made
- 3. When you share information about the Pilot/Beta Test with your students, please stress the importance of their role. They should understand that they are playing an integral part of this process and their constructive feedback is important. Their input will help lead the way to improving science education for many students like themselves.
- 4. As you conduct the Attitude Survey, and later in 2005 the Knowledge Survey and Post test in your classroom, please take the time to explain them to your students. It is important that the students understand that there is no right or wrong answers on the Attitude Surveys and for the Knowledge Survey (in September 2005) we do not expect them to know many of the answers at the beginning of the semester. Emphasize that the pre-test is a Knowledge Survey. We hope that by the end of the unit when they take the Post-test they will know most of the answers. (The Post-test will be the same test as the Knowledge Survey) The Pre/Post test method is the best way for us to collect evidence about how much students learn from the materials. More information about the Knowledge Survey and Post-test will be forthcoming in the Spring of 2005.
- 5. Providing feedback & visual data via three forms (see Instrumentation Binder):
  - a. *Student Attitude Survey* distribute at the end of a unit (after 8 lessons). Surveys will be available from the DETS Project Principal Investigator, or directly from Doug: (800) 950-9103 or Doug@pscounts.com.
  - b. *DETS Pilot Test Lesson Evaluation Form* teachers complete these forms for each lesson and send to Doug: PS International, 1451 Middle Way - Suite 9, Arnold MD 21012. These forms are available from your project PI or from Doug.
  - c. Obtain photo permissions using *Photo & Video Release Form* (form from PI or Doug)





<u>Photograph and Video Release for</u> <u>Diabetes Education for Tribal Schools (DETS)</u> (A curriculum project sponsored by the National Institutes of Health)

Dear Parent,

We would like your permission to photograph/video tape your child during his/her participation in the DETS Science Curriculum Project. These photographs and short video clips, unless you give permission otherwise, would be used to showcase activities, which may include your child, in the DETS curriculum. The accomplishments of students would be showcased in print material, the World Wide Web, DVDs and videos. Part of the reason for doing this is that parents and community members will be able to view activities and accomplishments with pride. We are sensitive to the fact that not all parents may wish for their child's picture to be included in the DETS curriculum material. Be assured that **no addresses or telephone numbers will ever be included in conjunction with a child's name or picture**. If you prefer that your child's picture or video not be included, this will in no way adversely affect any credit or recognition your child may receive for his or her work in the classroom.

NO STUDENT PHOTOS OR VIDEO WILL BE INCLUDED WITHOUT STUDENT AND PARENT/GUARDIAN CONSENT.

If you have further questions please call: \_\_\_\_\_ at \_\_\_\_\_ .

\_\_\_\_\_

I hereby grant to the NIH representative permission to take and use photographs and/or video tape of:

### MINOR'S NAME

in conjunction with participation in the DETS curriculum project study, and hereby release, discharge, and agree to save harmless the DETS Project, its legal representative or assigns, and all persons acting under its permission or authority from any liability arising from the electronic or print presentation or subsequent uses of said photographs and video clips including without limitation any claims for libel, compensation, or invasion of privacy. I also warrant that I am the legal guardian of the aforementioned minor.

Parent/Guardian signature date

Student signature

date

Thanks very much!



### Fall 2004 DETS Pilot Test Lesson Evaluation Form for Lesson:

<u>How did it go?</u> Please take a moment to complete this rating form on the main elements of the DETS lesson that you have recently test taught to your students. The survey is quickand-easy to complete, and will provide the curriculum developers with a good sense of what is working and what needs to be improved.

| Name:                  | School:          | Grade: | Date of lesson: |
|------------------------|------------------|--------|-----------------|
| Listed duration of les |                  |        |                 |
| Actual duration of les | sson in minutes: |        |                 |

| The lesson components below were: |   | ere: very              | / clear    | clear   | uncl                  | lear | very unclear  |
|-----------------------------------|---|------------------------|------------|---------|-----------------------|------|---------------|
| 1.                                | Lesson Goal   |                        |            |         |                       | ]    |               |
| 2.                                | Lesson Objectives   |                        |            |         |                       | ]    |               |
| 3.                                | Vocabulary  |                        |            |         |                       | ]    |               |
| 4.                                | Material List   |                        |            |         |                       | ]    |               |
| 5.                                | National Science Standar  | ds                     |            |         |                       | ]    |               |
| 6.                                | American Indian   |                        |            |         |                       |      |               |
|                                   | Content Standards   |                        |            |         |                       | ]    |               |
| 7.                                | State Standards   |                        |            |         |                       | ]    |               |
| 8.                                | Assessment  |                        |            |         |                       | ]    |               |
| Over                              | all   |                        |            |         |                       |      |               |
| 9.                                | Student participation was   | :                      | 🗖 low      |         | 🗆 average             | 2    | 🗖 high        |
| 10.                               | Diabetes awareness conte  | ent was:               | 🗆 insuft   | ficient | 🗆 adequa              | te   | excessive     |
| 11.                               | Science content was:  |                        | 🗆 insuft   | ficient | 🗆 adequa <sup>.</sup> | te   | 🗆 excessive   |
| 12.                               | For teachers lesson was:  | 🗆 teacher              | r friendly | 🗆 co    | onfusing              | 🗖 to | o complicated |
| 13.                               | For students lesson was:  | 🗖 too eas              | Ý          | 🗖 ju    | ıst right             | 🗖 to | o difficult   |
| 14.                               | Lesson length was:  | 🗖 too long             | )          | 🗖 ju    | ıst right             | 🗖 to | o short       |
| 15.                               | Also, lesson was:   | $\Box$ other: _        |            |         |                       |      |               |
| 16.                               | This lesson needs more:   | □ support<br>□ other:_ | -          | rials 🗆 | inservice             | Π α: | ssessments    |
| 17.                               | Briefly comment on lesson strengths (use back of sheet if necessary): |                        |            |         |                       |      |               |

18. Briefly comment on areas that need improvement (use back of sheet if necessary):

Thanks! Doug Coulson: (800) 950-9103; Doug@pscounts.com

## DETS Pilot Test Teacher Web Survey

Introduction: This survey should take about 10 minutes. The purpose of the survey is to document your perception of the DETS curriculum pilot test lessons you have taught thus far. Your confidential responses will help provide candid feedback on this development phase of the DETS curriculum - thanks!



# Teacher Name:

| Grad | e Le | evel |   |
|------|------|------|---|
|      |      |      | - |

|   | <u> </u> |
|---|----------|
| - | v<br>b   |

### School:

4





### **Background Data**

- A. How many DETS lessons have you taught during
  - the Pilot Test Phase?



B. About how many of your students participated in the DETS pilot lessons?

| 4 |  |
|---|--|

C. Briefly list the *topics* and *names* of the DETS lessons that you taught.

|   | A |
|---|---|
|   | - |
| - | Þ |

### **Survey Questions**

1. Describe the level of participation of your students while you were teaching these lessons.

Specifically, were all lessons equally successful? And, in your opinion, what components distinguished between successful lessons and less successful lessons?



5. From your perspective were the lessons that you taught from the DETS curriculum adequately aligned with the National Science Standards?

| Please briefly elaborate    | 2.       |   |                   |                  |
|-----------------------------|----------|---|-------------------|------------------|
| ·                           |          |   |                   | <b>A</b>         |
|                             |          |   |                   | -                |
|                             |          |   |                   |                  |
| 6. In general what have b   | een the  | strenaths of t                          | ·he               |                  |
| DETS lessons thus far?      |          | • · · • · · · · · · · · · · · · · · · · |                   |                  |
|                             |          |   |                   | -                |
|                             |          |   |                   |                  |
|                             |          |   | E.                |                  |
| 7. In general what areas a  | of the Γ | ETS lessons t                           | nat               |                  |
| you taught need improv      |          |   |                   |                  |
| you ruugiii neeu improv     |          |   |                   | -                |
|                             |          |   |                   |                  |
|                             |          |   | E.                | ×                |
| 8. Please take a final mom  | ent to   | provide us with                         | 0                 |                  |
| couple of overall rating    |          |   |                   |                  |
| the DETS curriculum th      | •        |   | ~~~~~             |                  |
| a. From a teacher           | • • • •  | nective how ea                          | su-to-use is the  | NETS             |
| curriculum?                 | s per s  | pective now eu.                         | sy-10-use is the  |                  |
|                             |          |   |                   |                  |
| very difficu                | l+ +o    |   |                   |                  |
| use                         | 11 10    | difficult to use                        | easy to use       | very easy to use |
| b. Compared to ot           | her sci  | ence curriculun                         | n that vou have t | auaht, how       |
| •                           |          |   | ETS curriculum?   | •                |
| , 555 ,<br>N                |          | n                                       |                   | n                |
| very unengo                 | aina     | unengaging                              | engaging          | very engaging    |
|                             |          |   |                   | ver y enguging   |
| 9. Please make any addition |          |   | he                |                  |
| DETS curriculum in the      | space b  | Delow.                                  |                   | _                |
|                             |          |   |                   | <u> </u>         |
|                             |          |   |                   | ~                |
|                             |          |   | E F               |                  |

Thanks for your help!
|                               | • =                                      | Observational Protocol<br>Biology Curriculum |
|-------------------------------|--|--|
| School:<br>Teacher:<br>Grade: | <br>Observer:<br>Date:<br># of students: | M F  |

1. Briefly describe the <u>classroom setting</u> in which the lesson took place (i.e., space, seating, arrangements, etc). Take photographs and use diagrams.

| 2. | What is working?   | What is not working? Describe and rate | (5 = |
|----|--------------------|--|------|
|    | working very well; | 1 = not working at all) relative to:   |      |
|    | a Deading level    | Datino <sup>.</sup>                    |      |

| а. к | keading level                | Rating: |
|------|------------------------------|---------|
| b. C | Classroom logistics and flow | Rating: |
| c. C | Conceptual connections       | Rating: |
| d. 5 | Students on-task and engaged | Rating: |

Five: Prototype Observational Protocol (2 pages)

| 3. | Who  | What are students doing? Describe and rate      |           |  |  |  |  |  |  |  |
|----|------|---|-----------|--|--|--|--|--|--|--|
|    | (5 = | working very well; 1 = not working at all) rela | ative to: |  |  |  |  |  |  |  |
|    | а.   | Able to follow process and procedures           | Rating:   |  |  |  |  |  |  |  |
|    | b.   | Working well in groups                          | Rating:   |  |  |  |  |  |  |  |
|    | С.   | Acting as scientists                            | Rating:   |  |  |  |  |  |  |  |
|    |      |   |           |  |  |  |  |  |  |  |

5. How closely did the teacher follow the lesson plan?

| 1      | 2   | 3 | 4 | 5    | 6     | 7 | 8 | 9 |
|--------|-----|---|---|------|-------|---|---|---|
| not    |     |   |   | very |       |   |   |   |
| close  | ely |   |   | cl   | osely |   |   |   |
| at all |     |   |   |      |       |   |   |   |

6. Overall, did the teacher create a classroom climate consistent with the philosophy of inquiry and constructivism (i.e., 5E Model)

| 1      | 2            | 3 | 4 | 5 | 6 | 7 | 8        | 9     |
|--------|--------------|---|---|---|---|---|----------|-------|
| not    | not somewhat |   |   |   |   |   |          | to a  |
| at all |              |   |   |   |   | ( | great e> | rtent |



## Ethnographic Component: COMMUNITY LEADER INTERVIEW

#### 1. Please briefly describe your understanding of the DETS project.

#### 2. What is important for us to learn about diabetes in your community?

- a. Scope How big a problem is diabetes for people in your community?
- b. History –How long has it been a part of the community?
- c. Awareness When did they first become aware of the disease? Do people talk openly about the disease? If so, when did people first start talking about diabetes?

#### 3. How much do you think people in your community know about diabetes?

- a. Are there particular issues people are concerned about?
- b. Are there particular prevention strategies that seem to work well?

#### 4. Does your community currently have any diabetes awareness or prevention programs?

- a. If so please describe.
- b. How involved is the community in these efforts?
- c. Are tribal leaders involved in these efforts?
- d. Are there enough health practitioners in your community who know about a lot about diabetes prevention?
- 5. What are some of the issues in your community that may affect how people understand diabetes and approach prevention efforts?
  - a. How does diabetes affect people in your community (4 dimensions)
  - b. Are there cultural issues that affect how people view diabetes?
  - c. Are there cultural issues that may help people address the problem?
  - d. What do you think is the biggest challenge for prevention in your community?

#### 6. Are you directly involved with the project? In what way?

- a. Are you able to participate in the way you would like?
- b. Are the right people involved? If not, who else should be involved?

#### 7. In your opinion, is there a strong connection between the community and the project?

a. If you wanted more information about the project or about how things are going would you know who to ask?

## 8. Have you seen a sample lesson? If so, does the curriculum/concept reflect the context/culture of your community?

- a. Would people in your community be open to lessons that include cultural elements from other tribes?
- b. Are there any cultural considerations that will be important for the DETS project team to understand while developing and implementing this curriculum?

Interview questions have also been developed for: parents; teachers; curriculum subcommittee members; and advisory board members.



## **DETS Science: A Biology Curriculum** Fall 2004 Prototype 7<sup>th</sup> Grade Student Survey

## **Eight Lessons from Unit on Body Systems**

We want to hear from you! Your ideas are important to us. Please complete this three-page survey for *DETS Science: A Biology Curriculum*. This survey will help your teachers and the project developers make this a better science chapter. To remind you about each lesson, have your Student Edition with you when you fill out this survey. Thanks!

| 1. | A. Your Name:                   |              |                 |
|----|---------------------------------|--------------|-----------------|
|    | B. Your Teacher's Name:         |              |                 |
|    | C. School:                      |              |                 |
|    | D. Class period:                |              |                 |
|    | E. Today's Date:                |              |                 |
| 2. | I thought that these lessons we | ere:         |                 |
|    | ☐ too easy                      | 🔲 just right | □ too difficult |

3. Please take a moment to think about the eight lessons. These lessons are listed below. For each lesson, please check the box that tells us how much you feel <u>you learned</u>.

| Activity Title         |         |              | I learned   | 1     |                     |
|------------------------|---------|--------------|-------------|-------|---------------------|
|                        | Nothing | A little bit | Some things | A lot | If you really liked |
|                        |         |              |             |       | the lesson, mark    |
|                        | 1       | 2            | 3           | 4     | below.              |
| Take Diabetes to Heart |         |              |             |       |                     |
| Digest This!           |         |              |             |       |                     |
| Insulin is it in you?  |         |              |             |       |                     |
| You Could Get          |         |              |             |       |                     |
| Diabetes? No "Kidney"- |         |              |             |       |                     |
| ing!                   |         |              |             |       |                     |
| Take a "Bite" out of   |         |              |             |       |                     |
| Diabetes               |         |              |             |       |                     |
| The Un-"nerve"-ing     |         |              |             |       |                     |
| Power of Diabetes      |         |              |             |       |                     |
| "Expecting" Diabetes?  |         |              |             |       |                     |
| I Can't Breathe        |         |              |             |       |                     |

4. Overall, what did you *like most* about the lessons in this unit? Please be as specific as you can by mentioning particular lessons that you liked *and tell us why*.

Overall, what did you <u>like least</u> about the lessons in this unit? Please be as specific as you can by mentioning particular lessons that you did not like and tell us <u>how we could change</u> <u>them to make them better</u>.



## Next, for each statement below please check the box under the word that tells us how much you agree or disagree - thanks

|     | r each statement, indicate the extent<br>which you agree or disagree.               | Strongly<br>Agree | Agree | Not<br>Sure | Disagree | Strongly<br>Disagree |
|-----|---|-------------------|-------|-------------|----------|----------------------|
| 1.  | I am curious about the world in which we live.                                      |                   |       |             |          |                      |
| 2.  | Science lessons are fun.  |                   |       |             |          |                      |
| 3.  | I would like to belong to a science<br>club.  |                   |       |             |          |                      |
| 4.  | I would prefer to do experiments<br>than to read about them.                        |                   |       |             |          |                      |
| 5.  | Working in a science laboratory<br>would be an interesting way to make<br>a living. |                   |       |             |          |                      |
| 6.  | I would like to teach science when I<br>leave school.                               |                   |       |             |          |                      |
| 7.  | School should have more science<br>lessons each week.                               |                   |       |             |          |                      |
| 8.  | A job as a scientist would be interesting.  |                   |       |             |          |                      |
| 9.  | I look forward to science lessons.  |                   |       |             |          |                      |
| 10. | I would like to be a scientist when I<br>leave school.                              |                   |       |             |          |                      |

Finally, please tell us what you would most like to be or do when you grow up:

Thanks for your help!

Seven: Prototype 7<sup>th</sup> grade Student Attitude Survey (3pages)



Fall 2004

## Unit/Lesson Topic Outline SCC DETS Project

This Unit/Lesson Topic Outline provides Doug (i.e., evaluator) with a content basis for creating:

- a. Student attitude surveys
- b. Achievement item sampling plans

The Fall 2004 Prototype 7<sup>th</sup> Grade Student [Attitude] Survey in this Instrumentation Binder was based on the Grade 7 information below.

Units Grade 5 Unit on Body Systems

> Materials Grade 5 lessons Circulatory Round and Round it Goes! Digestive Chew on This for Awhile! Endocrine system

> > Don't be Insulted, it's just Insulin! Excretory System

Excretion, it's not just a dirty word! Musculoskeletal System The Tooth About Diabetes Nervous System

Don't be Nervous! Reproductive System Life Goes On Reproductive System- Genetics Just like my Dad Respiratory System Take a Deep Breath

#### Grade 6 Unit on Body Systems

Materials Grade 6 lessons Circulatory The Heart Takes a Pounding! Digestive The Carb Craze Endocrine system Get your Insulin Hooked Up! Excretory System Don't "Waste" Time - Prevent Diabetes! Musculoskeletal System The Bare Bones on Diabetes! Nervous System Are you "Nervous" about Diabetes? **Reproductive System** The Copy Machine **Reproductive System- Genetics** Rebops **Respiratory System** Taking the Air out of Diabetes

Grade 7 Unit on Body Systems [see survey] Materials Grade 7 lessons Circulatory Take Diabetes to Heart Digestive **Digest This!** Endocrine system Insulin...is it in you? Excretory System You Could Get Diabetes? No "Kidney"-ing! Musculoskeletal System Take a "Bite" out of Diabetes Nervous System The Un-"nerve"-ing Power of Diabetes Reproductive System "Expecting" Diabetes? **Respiratory System** I Can't Breathe



## Fall 2004 DETS Prototype 5-8 Life Science Assessment (From Janet Belcourt's Curriculum Writing Team)

## **Section 1: Multiple Choice**

Directions: Select the term that best completes the following statement.

- 1. The stomach is a major organ in the:
  - a. excretory system
  - b. digestive system
  - c. circulatory system
  - d. musculoskeletal system
- 2. The endocrine system produces:
  - a. white blood cells
  - b. waste products
  - c. red blood cells
  - d. hormones
- 3. The circulatory system is primarily composed of:
  - a. heart and blood vessels
  - b. brain and spinal cord
  - c. stomach and intestines
  - d. kidneys and ureters
- 4. The main function of the excretory system is to:
  - a. regulate hormone levels
  - b. deliver messages from the brain to the rest of the body
  - c. remove waste products from the body
  - d. produce new offspring
- 5. Proper foot care is important to diabetics because foot damage can be caused by:
  - a. retinopathy
  - b. neuropathy
  - c. athlete's foot
  - d. low blood pressure
- 6. Retinopathy is a condition associated with the:
  - a. kidneys
  - b. eye
  - c. liver
  - d. brain

Nine: DETS Prototype 5-8 Life Science Assessment (3 pages)

- 7. Neuropathy is a condition associated with the:
  - a. nervous system
  - b. endocrine system
  - c. excretory system
  - d. reproductive system
- 8. The hormone most commonly associated with diabetes is:
  - a. estrogen
  - b. progesterone
  - c. insulin
  - d. testosterone
- 9. Perhaps the most important organ in the respiratory system is the:
  - a. heart
  - b. kidneys
  - c. lungs
  - d. liver
- 10. The organs in the excretory system include:
  - a. kidneys and bladder
  - b. lungs
  - c. brain
  - d. heart
- 11. Blood sugar is also known as:
  - a. glucose
  - b. fructose
  - c. sucrose
  - d. lactose
- 12. Which organ produces insulin?
  - a. gall bladder
  - b. kidneys
  - c. liver
  - d. pancreas
- 13. Diabetes may affect the circulatory system by:
  - a. lowering blood pressure
  - b. increasing the diabetes of the blood vessels
  - c. lowering the number of white blood cells in the blood
  - d. increasing blood pressure
- 14. The best way to prevent the onset of Type 2 Diabetes is:
  - a. healthy diet and exercise
  - b. smoke cigarettes
  - c. Eat a diet high in carbohydrates and saturated fats.
  - d. Eat smaller meals

- 15. Diabetes has become more prevalent because:
  - a. it is highly contagious
  - b. diets and lifestyles have changed from 100 years ago
  - c. there is less healthy food available to be eaten
  - d. it is a government conspiracy

## **Section 2: Short Answer**

Directions: Answer the following questions using complete sentences.

16. List as many body systems as you can.

17. What is Diabetes?

18. What are some of the functions of the excretory system?

19. How can Type 2 Diabetes be prevented?

## DETS Beta Test Teacher Web Survey

**Introduction**: This Beta survey should take about 15 minutes. The purpose of the survey is to document your perception of the DETS curriculum beta test lessons you have taught in '06 (i.e.: from January '06 through June '06). Your confidential responses will help provide candid feedback on this development phase of the DETS curriculum - thanks!



| • |  |
|---|--|
|   |  |

|             | D.          | . How<br>'06  | )?                     |   |                         |              |                       |               |             |                         |             | 06 through November                   |
|-------------|-------------|---------------|------------------------|---|-------------------------|--------------|-----------------------|---------------|-------------|-------------------------|-------------|---------------------------------------|
|             |             |               |                        | C <sub>2</sub>  | C                       | 3            | C                     | 4             | C           | 5                       | C           | more than 5                           |
|             | E.          | Abou          |                        | ny of your st<br>)  |                         | -            | -                     |               |             |                         |             | More than 40                          |
|             | F.          | Appro         | oximately              | what perce  | ntage (r                | number       | r only)               | of your       | DETS        | 5 student               | ts we       | re Native American?                   |
|             | G.          | •••           | oximately<br>e January | •   | lassrooi                | m hour       | rs (num               | ber onl       | y) hav      | e you spe               | ent te      | eaching DETS lessons                  |
|             | H.          | . Brief       | ly list the            | e <i>topics</i> and                                       | names (                 | of the       | DETS                  | lessons       | s that      | you taug                | ht.         |                                       |
|             |             |               |                        |   |                         |              |                       |               |             | Þ                       | Ŧ           |                                       |
|             | I.          |               | •                      | ••  | •                       | •            |                       | •             |             |                         |             | sson. Generally, was<br>um materials? |
|             |             |               |                        |   |                         |              |                       |               |             | Þ                       | Ĺ           |                                       |
| <u>Surv</u> | <u>ey (</u> | <u>Questi</u> | <u>ons</u>             |   |                         |              |                       |               |             |                         |             |                                       |
|             | 1.          |               |                        | priate were<br>nappropriate                               |                         |              |                       |               |             | dents?.<br>priate       | C           | very appropriate                      |
|             | 2.          | Pleas         | e rate the             |   |                         |              |                       |               |             |                         |             | hing these lessons.<br>ed             |
|             | 3.          | Plea          | se briefly             | ould you rate<br>Too ea<br>y explain you<br>n "just right | sy<br>Ir ratin <u>g</u> | C<br>g. That | just rigl<br>t is, wh | nt<br>ich asp | C<br>ects n | too diffici<br>vere too | ult<br>easy | ts?<br>or too difficult? What         |
|             |             |               |                        |   |                         |              |                       |               |             | Þ                       | *<br>T      |                                       |

| 4. Hov  | v well did your students lil   | ke the DETS lessons   | ?                                 |  |
|---------|--|-----------------------|-----------------------------------|--|
|         | Really disliked them   | Disliked them         | C Liked them                      | Really liked them  |
|         | tural content, science con   |                       |                                   | , materials list, vocabulary,<br>rly effective and easy to |
| 4       |  |                       | <u> </u>                          | *<br>*   |
| cul     | se list which lesson compo<br>tural content, science con<br>ficult to use? |                       |                                   | , materials list, vocabulary,<br>rly ineffective and       |
| 4       |  |                       |                                   | *<br>*   |
|         | n your perspective were th<br>gned with the National Sc                    | •                     | aught from the DE                 | TS curriculum adequately                                   |
| -       | ase briefly elaborate.   |                       | very aligned                      | not sure   |
| 4       | ]  |                       | -<br>  4                          |  |
| 8. In g | eneral what have been the  | e strengths of the D  | ETS lessons thus f                | ar?  |
| 4       | 1  |                       | ] •                               |  |
| 9. In g | eneral what areas of the [   | DETS lessons that y   | ou taught need imp                | rovement?  |
|         |  |                       | Þ                                 | ×<br>Y   |
|         | ase take a final moment to<br>h the DETS curriculum th                     |                       | ew more overall rat               | ings on your experiences                                   |
|         |  | ul were you in implem |                                   |  |
|         | very unsuccessful  | unsuccessful          |                                   | ·  |
|         | D. From a teache   | er's perspective how  | easy-to-use is the<br>easy to use |  |

| - | c. Compared to other<br>your students wo | as the DETS | curriculum? |      |                    |
|---|--|-------------|-------------|------|--------------------|
| C | very unengaging                          |             | -           |      | very engaging      |
|   | d. Overall how strong<br>American examp  | 5           |             |      | ework (e.g. Native |
| C | •  | strong      |             | weak | C very weak        |
|   | Please elaborate:                        | Shong       |             | weak | Vol y Would        |
|   |  |             |             |      |                    |
|   |  |             |             | •    |                    |
|   |  |             |             |      |                    |

11. Please describe what kind of support or assistance you would need to fully implement the DETS curriculum.

|  |  | <u> </u> |
|--|--|----------|
|  |  | Þ        |

## Thanks for your help!

<u>S</u>ubmit <u>R</u>eset

<u>Instructions</u>. For each statement below please check the box under the word that tells us how much you agree or disagree - thanks

|     | r each statement, indicate the<br>tent to which you agree or disagree.            | Strongly<br>Agree | Agree | Not<br>Sure | Disagree | Strongly<br>Disagree |
|-----|---|-------------------|-------|-------------|----------|----------------------|
| 1.  | I am curious about the world in<br>which we live.                                 |                   |       |             |          |                      |
| 2.  | Social studies lessons are fun.   |                   |       |             |          |                      |
| 3.  | I would like to belong to an<br>environmental club.                               |                   |       |             |          |                      |
| 4.  | I would prefer to do community<br>activities than to read about<br>them.          |                   |       |             |          |                      |
| 5.  | Working in a community center<br>would be an interesting way to<br>make a living. |                   |       |             |          |                      |
| 6.  | I would like to teach social<br>studies when I leave school.                      |                   |       |             |          |                      |
| 7.  | School should have more social<br>studies lessons each week.                      |                   |       |             |          |                      |
| 8.  | A job as a community worker<br>would be interesting.                              |                   |       |             |          |                      |
| 9.  | I look forward to social studies<br>lessons.                                      |                   |       |             |          |                      |
| 10. | I would like to be an<br>environmentalist when I leave<br>school.                 |                   |       |             |          |                      |

Finally, please tell us again what you would most like to be or do when you grow up:

Thanks for your help!

**Eleven:** 5-8 Social Studies Pre Attitude Survey – SIPI (1 page)



## DETS Social Studies Unit on Diabetes Spring 2006 Survey

We want to hear from you! Your ideas are important to us. Please complete this three-page survey about the lessons on diabetes that you just finished. This survey will help your teachers make this a better social studies unit. There are no right or wrong answers. Thanks!

| 1. | A. Your Name:                |      |
|----|------------------------------|------|
|    | B. Your Teacher's Name:      |      |
|    | C. School:                   |      |
|    | D. Class period:             |      |
|    | E. Today's Date:             |      |
| 2. | I thought that these lessons | ere: |

| 🗌 too easy | 🗌 just right | too difficult |
|------------|--------------|---------------|
|------------|--------------|---------------|

3. Please take a moment to think about the four lessons. These lessons are listed below. For each lesson, please check the box that tells us how much you feel <u>you learned</u>.

| Lesson Title             |           |           |             |           |
|--------------------------|-----------|-----------|-------------|-----------|
|                          | I learned | I learned | I learned   | I learned |
|                          | nothing   | a little  | some things | a lot     |
|                          |           | bit       |             |           |
|                          | 1         | 2         | 3           | 4         |
| LESSON ONE: Letter from  |           |           |             |           |
| Down Under               |           |           |             |           |
| LESSON TWO: Changes and  |           |           |             |           |
| Choices                  |           |           |             |           |
| LESSON THREE: Anna's     |           |           |             |           |
| Questions about Diabetes |           |           |             |           |
| LESSON FOUR:             |           |           |             |           |
| Connections              |           |           |             |           |

 Overall, what did you <u>like most</u> about the lessons in this unit? Please be as specific as you can by mentioning particular lessons that you liked <u>and tell</u> <u>us why</u>.

5. Overall, what did you <u>like least</u> about the lessons in this unit? Please be as specific as you can by mentioning particular lessons that you did not like and tell us <u>how we could change them to make them better</u>.

# <u>Instructions</u>. For each statement below please check the box under the words that tells us how much you agree or disagree - thanks

|     | r each statement, indicate the<br>tent to which you agree or disagree.            | Strongly<br>Agree | Agree | Not<br>Sure | Disagree | Strongly<br>Disagree |
|-----|---|-------------------|-------|-------------|----------|----------------------|
| 1.  | I am curious about the world in which we live.                                    |                   |       |             |          |                      |
| 2.  | Social studies lessons are fun.   |                   |       |             |          |                      |
| 3.  | I would like to belong to an<br>environmental club.                               |                   |       |             |          |                      |
| 4.  | I would prefer to do community<br>activities than to read about<br>them.          |                   |       |             |          |                      |
| 5.  | Working in a community center<br>would be an interesting way to<br>make a living. |                   |       |             |          |                      |
| 6.  | I would like to teach social studies<br>when I leave school.                      |                   |       |             |          |                      |
| 7.  | School should have more social<br>studies lessons each week.                      |                   |       |             |          |                      |
| 8.  | A job as a community worker<br>would be interesting.                              |                   |       |             |          |                      |
| 9.  | I look forward to social studies<br>lessons.                                      |                   |       |             |          |                      |
| 10. | I would like to be an<br>environmentalist when I leave<br>school.                 |                   |       |             |          |                      |

Finally, please tell us again what you would most like to be or do when you grow up:

Thanks for your help!

Eleven: 5-8 Social Studies Post Attitude Survey – SIPI (3 pages)

| Name: | Teacher's Name: | <br>School: |
|-------|-----------------|-------------|
|       |                 |             |

<u>Instructions</u>. For each statement below please check the box under the word that tells us how much you agree or disagree - thanks

|     | r each statement, indicate the<br>tent to which you agree or disagree.              | Strongly<br>Agree | Agree | Not<br>Sure | Disagree | Strongly<br>Disagree |
|-----|---|-------------------|-------|-------------|----------|----------------------|
| 1.  | I am curious about the world in which we live.                                      |                   |       |             |          |                      |
| 2.  | Science lessons are fun.  |                   |       |             |          |                      |
| 3.  | I would like to belong to a science<br>club.  |                   |       |             |          |                      |
| 4.  | I would prefer to do experiments<br>than to read about them.                        |                   |       |             |          |                      |
| 5.  | Working in a science laboratory<br>would be an interesting way to<br>make a living. |                   |       |             |          |                      |
| 6.  | I would like to teach science<br>when I leave school.                               |                   |       |             |          |                      |
| 7.  | School should have more science<br>lessons each week.                               |                   |       |             |          |                      |
| 8.  | A job as a scientist would be interesting.  |                   |       |             |          |                      |
| 9.  | I look forward to science lessons.  |                   |       |             |          |                      |
| 10. | I would like to be a scientist<br>when I leave school.                              |                   |       |             |          |                      |

Finally, please tell us what you would most like to be or do when you grow up:

Thanks for your help!

Eleven: 5-8 Science Pre Attitude Survey – Stone Child (1 page)



## DETS Science Unit on Diabetes Spring 2006 Survey

We want to hear from you! Your ideas are important to us. Please complete this three-page survey about the lessons on diabetes that you just finished. This survey will help your teachers make this a better science unit. There are no right or wrong answers. Thanks!

| 1. | A. Your Name:                |              |               |
|----|------------------------------|--------------|---------------|
|    | B. Your Teacher's Name:      |              |               |
|    | C. School:                   |              |               |
|    | D. Class period:             |              |               |
|    | E. Today's Date:             |              |               |
| 2. | I thought that these lessons | were:        |               |
|    | 🗌 too easy                   | 🗌 just right | too difficult |

3. Please take a moment to think about the five lessons. These lessons are listed below. For each lesson, please check the box that tells us how much you feel <u>you learned</u>.

| Lesson Title          |           |           |             |           |
|-----------------------|-----------|-----------|-------------|-----------|
|                       | I learned | I learned | I learned   | I learned |
|                       | nothing   | a little  | some things | a lot     |
|                       |           | bit       |             |           |
|                       | 1         | 2         | 3           | 4         |
| LESSON ONE: History   |           |           |             |           |
| in the Making         |           |           |             |           |
| LESSON TWO: Focus on  |           |           |             |           |
| Diabetes              |           |           |             |           |
| LESSON THREE: Health  |           |           |             |           |
| is Life in Balance    |           |           |             |           |
| LESSON FOUR: The      |           |           |             |           |
| Community Care Clinic |           |           |             |           |
| LESSON FIVE: Taking   |           |           |             |           |
| the Message Home      |           |           |             |           |

 Overall, what did you <u>like most</u> about the lessons in this unit? Please be as specific as you can by mentioning particular lessons that you liked <u>and tell</u> <u>us why</u>.

5. Overall, what did you <u>like least</u> about the lessons in this unit? Please be as specific as you can by mentioning particular lessons that you did not like and tell us <u>how we could change them to make them better</u>.

# <u>Instructions</u>. For each statement below please check the box under the words that tells us how much you agree or disagree – thanks

|     | r each statement, indicate the<br>tent to which you agree or disagree.              | Strongly<br>Agree | Agree | Not<br>Sure | Disagree | Strongly<br>Disagree |
|-----|---|-------------------|-------|-------------|----------|----------------------|
| 1.  | I am curious about the world in which we live.                                      |                   |       |             |          |                      |
| 2.  | Science lessons are fun.  |                   |       |             |          |                      |
| 3.  | I would like to belong to a science<br>club.  |                   |       |             |          |                      |
| 4.  | I would prefer to do experiments<br>than to read about them.                        |                   |       |             |          |                      |
| 5.  | Working in a science laboratory<br>would be an interesting way to<br>make a living. |                   |       |             |          |                      |
| 6.  | I would like to teach science when<br>I leave school.                               |                   |       |             |          |                      |
| 7.  | School should have more science<br>lessons each week.                               |                   |       |             |          |                      |
| 8.  | A job as a scientist would be interesting.  |                   |       |             |          |                      |
| 9.  | I look forward to science lessons.  |                   |       |             |          |                      |
| 10. | I would like to be a scientist when<br>I leave school.                              |                   |       |             |          |                      |

Finally, please tell us again what you would most like to be or do when you grow up:

Thanks for your help!

Eleven: 5-8 Science Post Attitude Survey – Stone Child (3 pages)

Teacher's Name: \_\_\_\_\_ School: \_\_\_\_\_

<u>Teacher Instructions</u>. Hand out one copy of this survey to each student in your class. Please read each statement to your students. Ask them to circle the smiley face which best describes their feeling about the statements. For example, tell the students that if they like science they should circle the smiley face, whereas if they don't like science, they should circle the frowning face. There are no right or wrong answers - thanks.

| For each statement, tell us whether<br>you agree [©], not sure [©] or<br>disagree [8]. |   | Agree      | Not<br>Sure | Disagree                |
|--|---|------------|-------------|-------------------------|
| 1.   | I like school.  | $\odot$    | $\bigcirc$  | $\overline{\mathbf{i}}$ |
| 2.   | I like science.                                       | $\odot$    | <u></u>     | $\dot{\mathfrak{S}}$    |
| 3.   | I am interested in health lessons.                    | $\odot$    |             | $\overline{\mathbf{i}}$ |
| 4.   | I know a lot about health                             | $\odot$    | ÷           | $\overline{\mathbf{i}}$ |
| 5.   | Science lessons are fun.                              | $\bigcirc$ | $\bigcirc$  | $\overline{\mathbf{i}}$ |
| 6.   | I would like to teach science<br>when I leave school. | $\odot$    | $\bigcirc$  | $\overline{\mathbf{i}}$ |
| 7.   | School should have more science<br>lessons each week. | $\odot$    |             | $\overline{\mathbf{i}}$ |
| 8.   | It is important to take care of<br>one's health.      | $\odot$    |             | $\overline{\mathbf{i}}$ |
| 9.   | I look forward to lessons about<br>health.            | $\odot$    | <u></u>     | $\dot{\mathfrak{S}}$    |
| 10.  | I like learning new things in school.                 | $\odot$    | <u></u>     | $\overleftrightarrow$   |

Thanks for your help!

Twelve: K-2 Beta Attitude Survey – KBOCC (1 page)

Questions about attitude for the Health Lessons.

Read each sentence and then mark the statement (circle the letter) that best fits your feelings about the statement.

- 1. I believe that diabetes is a problem for my family, friends and community. a. I agree with this b. I have no opinion c. I disagree with this
- 2. I feel that it is important o do everything I can to prevent and control diabetes in myself, my family, and my friends.a. I agree with this b. I have no opinion c. I disagree with this
- 3. I think it is important to study diabetes in school.a. I agree with thisb. I have no opinionc. I disagree with this
- 4. I like to study the science that helps me to understand diabetes.a. I agree with this b. I have no opinion c. I disagree with this
- 5. I know that I can make a difference in preventing, treating or curing diabetes. a. I agree with this b. I have no opinion c. I disagree with this
- 6. I would like to work in a job that will prevent or treat diabetes.a. I agree with this b. I have no opinion c. I disagree with this
- 7. Most of my friends believe that diabetes can be prevented, treated, or cured.a. I agree with thisb. I have no opinionc. I disagree with this
- 8. My family believes that diabetes can be prevented, treated, or cured.a. I agree with thisb. I have no opinionc. I disagree with this
- 9. Most of my friends and family and I believe it is important that everyone study about diabetes.a. I agree with this b. I have no opinion c. I disagree with this
- 10. My teachers care about my health and the health of my family and friends.a. I agree with thisb. I have no opinionc. I disagree with this

## Pre-Diabetes Unit Knowledge Survey

Directions: Please indicate which response you believe is the correct one for each of the following items. This is not a test. You will not be graded on your responses. Thanks for participating in the development of this important unit on diabetes.

- 1. Insulin is
- \_\_\_\_\_a. a sugar produced by the liver.
- \_\_\_\_\_b. important for digestion of sugars in foods.
- \_\_\_\_ c. a hormone produced by the pancreas.
- \_\_\_\_\_ d. a protein that increases blood glucose levels.
- 2. In persons with untreated diabetes,
- \_\_\_\_\_a. blood sugar levels are usually normal, but sometimes they are increased.
- \_\_\_\_\_b. blood sugar levels are increased.
- \_\_\_\_ c. blood sugar levels are decreased.
- \_\_\_\_\_d. blood sugar levels are normal, but digestion of sugars is increased.
- 3. MyPyramid is
- \_\_\_\_ a. a tool to help adults eat better.
- \_\_\_\_\_ b. a tool important in the study of Egypt and pharaohs.
- \_\_\_\_\_ c. a tool used to measure blood sugar levels.
- \_\_\_\_\_ d. a tool used to help persons of any age eat better and relate eating to physical activity.
- 4. Type 2 diabetes is
  - \_\_\_\_a. a preventable disease.
- \_\_\_\_\_b. seen only in older persons.
- \_\_\_\_ c. no longer diagnosed as frequently as it used to be.
- \_\_\_\_\_d. related only to a person's genetics (their family history of diabetes).
- 5. Which one of the following statements about diabetes is true?
- \_\_\_\_\_a. All persons with diabetes need to take insulin injections.
- \_\_\_\_\_b. Eating too much sugar is a major cause of diabetes.
- \_\_\_\_\_ c. Diabetes is controllable and is not a serious threat to health.
- \_\_\_\_\_ d. Diabetes can result in serious complications including heart disease, nerve damage, limb loss, kidney failure, and blindness.

- 6. Diabetes is diagnosed at about the same rate in different racial and ethnic groups.
- \_\_\_\_ True \_\_\_\_ False
- 7. Some people are at greater risk of developing type 2 diabetes, and all they can do is take steps to delay when they get the disease.

\_\_\_\_ True \_\_\_\_ False

## Post-Diabetes Unit Knowledge Survey

Directions: Please indicate which response you believe is the correct one for each of the following items. This is not a test. You will not be graded on your responses. Thanks for participating in the development of this important unit on diabetes.

- 1. Insulin is
- \_\_\_\_\_a. a sugar produced by the liver.
- \_\_\_\_\_b. important for digestion of sugars in foods.
- \_\_\_\_ c. a hormone produced by the pancreas.
- \_\_\_\_\_d. a protein that increases blood glucose levels.
- 2. In persons with untreated diabetes,
- \_\_\_\_\_a. blood sugar levels are usually normal, but sometimes they are increased.
- \_\_\_\_\_ b. blood sugar levels are increased.
- \_\_\_\_ c. blood sugar levels are decreased.
- \_\_\_\_\_d. blood sugar levels are normal, but digestion of sugars is increased.
- 3. MyPyramid is
- \_\_\_\_ a. a tool to help adults eat better.
- \_\_\_\_\_ b. a tool important in the study of Egypt and pharaohs.
- \_\_\_\_ c. a tool used to measure blood sugar levels.
- \_\_\_\_\_ d. a tool used to help persons of any age eat better and relate eating to physical activity.
- 4. Type 2 diabetes is
  - \_\_\_\_a. a preventable disease.
- \_\_\_\_\_ b. seen only in older persons.
- \_\_\_\_ c. no longer diagnosed as frequently as it used to be.
- \_\_\_\_\_d. related only to a person's genetics (their family history of diabetes).
- 5. Which one of the following statements about diabetes is true?
- \_\_\_\_\_a. All persons with diabetes need to take insulin injections.
- \_\_\_\_\_b. Eating too much sugar is a major cause of diabetes.
- \_\_\_\_\_ c. Diabetes is controllable and is not a serious threat to health.
- \_\_\_\_\_ d. Diabetes can result in serious complications including heart disease, nerve damage, limb loss, kidney failure, and blindness.

- 6. Diabetes is diagnosed at about the same rate in different racial and ethnic groups.
- \_\_\_\_ True \_\_\_\_ False
- 7. Some people are at greater risk of developing type 2 diabetes, and all they can do is take steps to delay when they get the disease.

\_\_\_\_ True \_\_\_\_ False

#### **LLTC 5 pre-test questions**

- 1. What are the risk factors associated with type 2 diabetes?
- 2. If you are diagnosed with type 2 diabetes, what are some prevention techniques you can apply to your lifestyle?
- 3. If you were to develop a "Wellness Plan", who would you like to have on the committee?
- 4. Once your "Wellness Plan" is developed, what do you and other committee members hope will happen?
- 5. What do these terms mean to you?
- A. Civic Responsibility
- B. Civic Action
- C. Civic-minded

#### **Introduction to Health is Life in Balance** Evaluation questions.

| 1. | There are four areas that keep you in balance. | <mark>True</mark> or False |
|----|--|----------------------------|
| 2. | My World includes family.                      | <mark>True</mark> or False |
| 3. | My Feelings would include happiness.           | <mark>True</mark> or False |
| 4. | My Body would include exercise.                | <mark>True</mark> or False |
| 5. | My Mind would include learning.                | <mark>True</mark> or False |
| 6. | To be in balance the parts should be equal.    | True of False              |

- 7. To learn and make choices would be an example of:
  - A. My World
  - **B.** My Feelings
  - C. My Body
  - D. My Mind
- 8. A messenger is someone you can learn from. True of False
- 9. If I wanted learn more about ways to stay in good health, I would ask:
  - A. teacher
  - B. doctor
  - C. policeman
  - **D.** truck driver
- 10. If something is "out of balance" it can be made to be in balance. **T** or **F**



August 12, 2004

#### Memo on site visit to classrooms on morning of September 30<sup>th</sup>, 2004

- TO: Janet Belcourt
- FM: Doug Coulson
- RE: Site visit request

The purpose of the classroom visit would be to informally meet teachers involved in the DETS curriculum development project and some of their students.

It would be great if the teachers were doing a DETS lesson that day, but that is not necessary.

I'd like permission from the teachers and students to do some classroom photography in order to begin the visual documentation of the project. I'll send along a photo permission document early next week.

I've done many classroom site visits across the country for various curriculum development projects, and these visits to the DETS classrooms will help develop a constructive picture (verbal and photographic) of pilot schools participating in the project.

Finally, my visit should be low key and flexible to the needs and activities that are happening in the school during the day that I visit.

Thanks.



## Pilot/Beta Test Site Visit Sign-Up Sheet

| Institution                                  | Possible Date<br>For Site Visit | Contact Person<br>Email &/or phone # |
|--|---------------------------------|--------------------------------------|
| CCCC Spirit Lake                             | TOT SHE VISI                    |                                      |
| Ft. Peck Community College                   |                                 |                                      |
| Haskell                                      |                                 |                                      |
| Keweenaw Bay Ojibwa Community<br>College     |                                 |                                      |
| Leech Lake/Woodlands Wisdom                  |                                 |                                      |
| NW Indian College                            |                                 |                                      |
| Southwestern Indian Polytechnic<br>Institute |                                 |                                      |
| Stone Child College                          |                                 |                                      |



DETS Teacher BETA TEST Checklist

The purpose of this brief list is to provide teachers with an easy reference reminder outline of their data responsibilities during their BETA TEST of the DETS curriculum.

Thanks for helping us out. Questions? Call or email Doug at 800 950-9103, or <u>Doug@pscounts.com</u>.

## Before Teaching the DETS Lessons

- Get: a) pre-knowledge surveys; b) pre-attitude surveys from your DETS coordinator
- Set up a system for linking or matching pre and post surveys (e.g., require students to *print clearly* their first and last names on each survey)
- Review all lessons thoroughly you are responsible for implementing the DETS lessons as written

## While Teaching the DETS Lessons

- Note how well you followed the DETS curriculum lessons *as written*
- Administer *before teaching* DETS lessons: a) pre-knowledge survey;
  b) pre-attitude survey
- Administer within one week of completing the DETS lessons:
  a) post-knowledge survey; b) post-attitude survey
- Match (i.e., link), student-by-student, all pre-lesson surveys with post-lesson surveys

## After Teaching the DETS Lessons

Return *matched (i.e., matched or linked by name)* pre-post knowledge and attitude surveys to your DETS coordinator

Complete the online Teacher Web Survey at <u>www.pscounts.com/detsbeta</u> Fifteen: Fall 2006 Teacher Beta Test Checklist (1 page)



DETS Principal Investigator BETA TEST Checklist

The purpose of this brief checklist is to provide principal investigators with an easy-reference reminder outline of their data responsibilities during their BETA TEST of the DETS curriculum.

Thanks for helping us out. Questions? Call or email Doug at 800 950-9103, or <u>Doug@pscounts.com</u>.

## Before the DETS Lessons are Taught

- Provide teachers via your DETS coordinator: a) pre-knowledge surveys (produced by writers); b) pre-attitude surveys (template available from Doug)
- Remind teachers to set up a system for matching (e.g., linking surveys using clearly printed first and last names) pre and post surveys
- Remind teachers to review all lessons thoroughly they are responsible for implementing the DETS lessons *as written*

## While the DETS Lessons are being Taught

- Check with teachers that they have properly administered pre-lesson surveys (i.e., attitude and knowledge)
- Remind teachers to match (i.e., link using names), student-by-student, all pre-lesson surveys with post-lesson surveys (i.e., attitude and knowledge)

## After the DETS lessons have been Taught

- Collect all pre-and-post lesson surveys
- Mail *copies* of pre-and-post lesson surveys to Doug (Doug Coulson, PS International, 1451 Middle Way, Arnold, MD, 21012; 800 950-9103)
- Include *answer key* to knowledge survey in mailing to Doug
- Remind teachers to complete the online Teacher Web Survey at <u>www.pscounts.com/detsbeta</u>

Fifteen: Fall 2006 PI Beta Test Checklist (1 page)

|  | School #1         |                   | School #2         |                   |
|--|-------------------|-------------------|-------------------|-------------------|
|  | Class #1: teacher | Class #2: teacher | Class #1: teacher | Class #2: teacher |
|  | & grade level     | & grade level     | & grade level     | & grade level     |
| Approximate number of students               |                   |                   |                   |                   |
| Unit names                                   |                   |                   |                   |                   |
| Lesson names                                 |                   |                   |                   |                   |
| Dates taught (or to be taught)               |                   |                   |                   |                   |
| Pre test data:<br>achievement?<br>attitude?  |                   |                   |                   |                   |
| Post test data:<br>achievement?<br>attitude? |                   |                   |                   |                   |
| Teacher web<br>survey?                       |                   |                   |                   |                   |